



Interoffice Memo
Office of Design Policy & Support

DATE: 12/12/2018

FILE: P.I.# 0007057
Warren County / GDOT District 2 - Tennille
Bridge Replacement – SR 16 @ Short Creek

FROM:  Brent Story, State Design Policy Engineer

TO: SEE DISTRIBUTION

SUBJECT: APPROVED CONCEPT REPORT

Attached is the approved Concept Report for the above subject project.

Attachment

Distribution:

Hiral Patel, Director of Engineering
Joe Carpenter, Director of P3
Albert Shelby, Director of Program Delivery
Carol Comer, Director, Division of Intermodal
Darryl VanMeter, Assistant Director of P3/State Innovative Delivery Administrator
Kim Nesbitt, Program Delivery Administrator
Bobby Hilliard, Program Control Administrator
Paul Tanner, State Transportation Planning Administrator
Eric Duff, State Environmental Administrator
Bill DuVall, State Bridge Engineer
Andrew Heath, State Traffic Engineer
Angela Robinson, Financial Management Administrator
Erik Rohde, State Project Review Engineer
Monica Flournoy, State Materials Engineer
Patrick Allen, State Utilities Engineer
Eric Conklin, State Transportation Data Administrator
Attn: Systems & Classification Branch
Benny Walden, Statewide Location Bureau Chief
Ed David Adams, State Safety Program Manager
Corbett Reynolds, District Engineer
Todd Price, District Preconstruction Engineer
Jamie Lindsey, District Utilities Manager
Mindy Sanders, Project Manager
BOARD MEMBER - 10th Congressional District

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
LIMITED SCOPE PROJECT CONCEPT REPORT**

Project Type: <u>Bridge Replacement</u>	P.I. Number: <u>0007057</u>	
GDOT District: <u>2</u>	County: <u>Warren</u>	
Federal Route Number: <u>N/A</u>	State Route Number: <u>16</u>	
Project Number: <u>CSBRG-0007-00(057)</u>		

This project consists of replacing the existing bridge on SR 16 over Short Creek.

Concept Report updated 11/07/18

Submitted for approval:

<u>Dan J. Wilton</u> Consultant Designer & Firm or GDOT Concept/Design Phase Office Head & Office <u>Hamberly W. Webb</u>	Moffatt & Nichol 7/13/18 Date <u>7/23/18</u>
State Program Delivery Administrator <u>M. Sanchez</u> <u>SHP</u>	Date <u>7/17/18</u>
GDOT Project Manager	Date

Recommendation for approval:

for <u>Eric Duff / OB</u> State Environmental Administrator	<u>8/15/18</u> Date
<u>Christopher Raymond / OB</u> State Traffic Engineer	<u>8/31/18</u> Date
<u>Bill DuVall / OB</u> State Bridge Engineer	<u>8/28/18</u> Date
<u>Todd Price / OB</u> District Preconstruction Engineer	<u>9/12/18</u> Date

- ☐ MPO Area: This project is consistent with the MPO adopted Regional Transportation Plan (RTP)/Long Range Transportation Plan (LRTP).
- ☒ Rural Area: This project is consistent with the goals outlined in the Statewide Transportation Plan (SWTP) and/or is included in the State Transportation Improvement Program (STIP).

<u>L. Paul Janner</u> State Transportation Planning Administrator	<u>8-16-18</u> Date
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Approval:

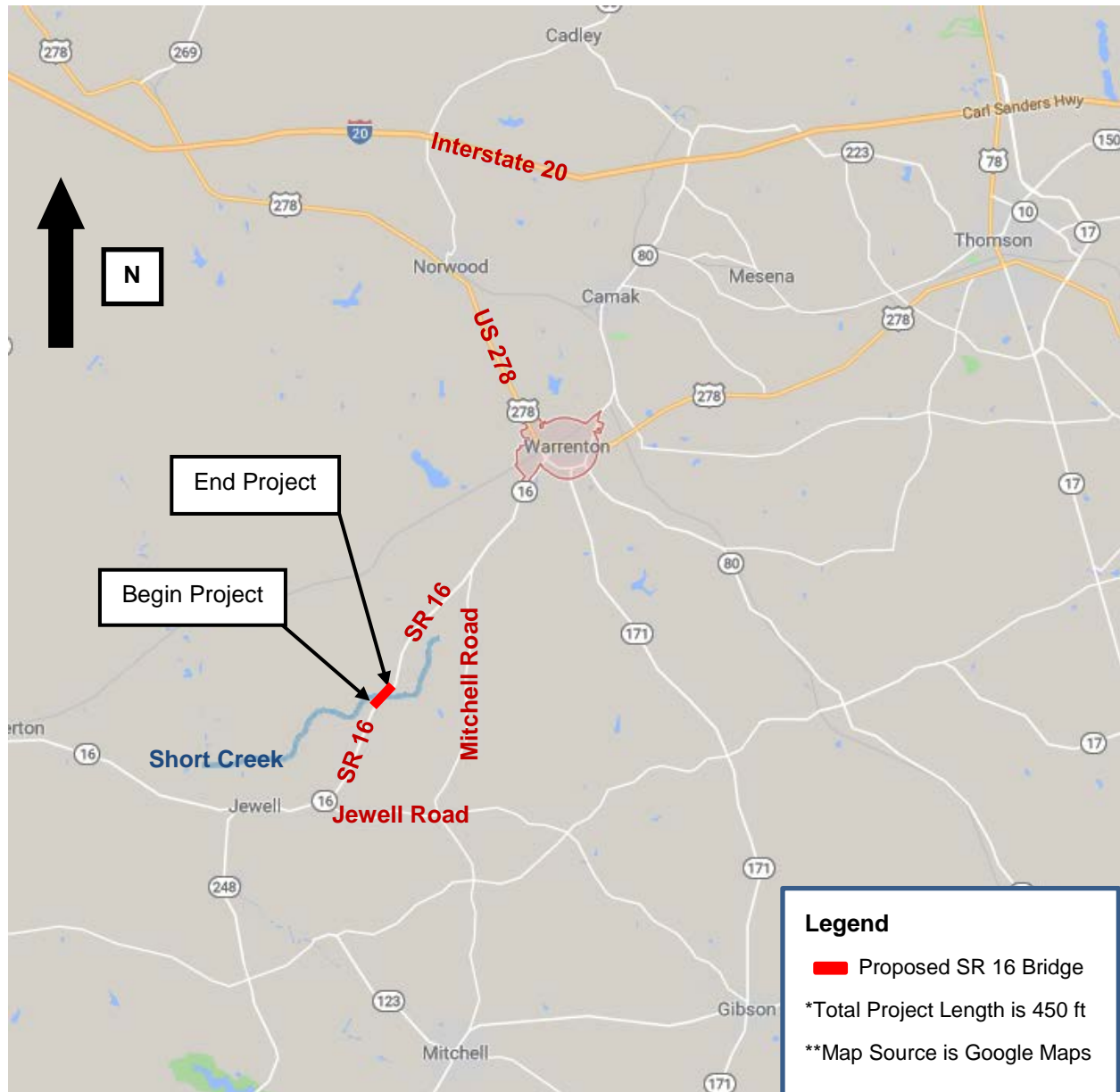
Concur: <u>Hied Kital</u> GDOT Director of Engineering	<u>9-16-18</u> Date
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Approve: <u>Margaret B. Finkle</u> GDOT Chief Engineer	<u>12.12.18</u> Date
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Concept Report also reviewed and recommended by:

Kerry Gore, Assistant State Utilities Administrator	8/15/18
Erik Rohde, State Project Review Engineer	8/20/18

PROJECT LOCATION MAP



**Bridge Replacement – SR 16 / Macon Highway over Short Creek
Warren County, GA
Structure ID 301-0004-0
Map Not To Scale**

PLANNING & BACKGROUND DATA

Project Justification Statement: The bridge on SR 16 over Short Creek, Structure ID 301-0004-0, was built in 1937. This bridge consists of two (2) spans of steel beams on concrete caps with steel piles. The bridge was designed using an H-15 vehicle, which is below current design standards. The overall condition of this bridge would be classified as fair. The deck is in fair condition with heavy cracking with efflorescence throughout. The superstructure is in fair condition with minor corrosion on all beams with heavy pitting and corrosion noted in the bearing areas. The substructure is in satisfactory condition with minor cracking in the concrete caps. This bridge is classified as having an unknown foundation and therefore could be at risk for scour. Due to the age of the structure, the structural integrity of the bridge pertaining to the design vehicle, and the unknown foundation of the substructure, replacement of this 80-year-old bridge is recommended.

Existing conditions: SR 16 is a two lane rural highway with 11-foot travel lanes and three-foot shoulders (one-foot paved). The existing bridge is 64-feet long with 11-foot travel lanes and one-foot shoulders.

Other projects in the area:

- PI No 0013815, SR 16 @ Rocky Comfort Creek in Warren County

MPO: N/A - not in an MPO/Not Urban

TIP #: N/A

Congressional District(s): 10

Federal Oversight: ☐PoDI ☒Exempt ☐State Funded ☐Other

Projected Traffic: AADT 24 HR T: 23%
Current Year (2018): 1775 Open Year (2022): 1850 Design Year (2042): 2250
Traffic Projections Performed by: Moffatt & Nichol
Date approved by the GDOT Office of Planning: 8/30/18

Functional Classification (Mainline): Rural Minor Arterial

Complete Streets - Bicycle, Pedestrian, and/or Transit Standards Warrants:

Warrants met: ☒None ☐Bicycle ☐Pedestrian ☐Transit

Pavement Evaluation and Recommendations

Initial Pavement Evaluation Summary Report Required? ☒No ☐Yes
Initial Pavement Type Selection Report Required? ☒No ☐Yes
Feasible Pavement Alternatives: ☒HMA ☐PCC ☐HMA & PCC

DESIGN AND STRUCTURAL

Description of Proposed Project: The proposed project will replace the existing 64-foot long bridge at SR 16 and Short Creek with an 85-foot long bridge with 12-foot travel lanes and eight-foot shoulders. The substandard existing bridge will be replaced with a bridge that meets current standards and is structurally sufficient. The anticipated proposed structure is a single-span PSC beam bridge with concrete deck and barriers. The roadway typical section will transition from the existing two 11-foot lanes with 3-foot shoulders (1-foot paved) to two 12-foot lanes with 10-foot shoulders (4-foot paved). The bridge typical section will increase from the existing 11-foot lanes with 1-foot shoulders to 12-foot lanes with 8-foot shoulders. The total project length is 0.10 miles. An off-site detour will be utilized, diverting traffic entirely on other state routes. The detour route will travel along SR 123, SR 102, SR 171, and SR 12 Bypass, as shown in the detour route map, resulting in an additional 19 miles along the detour route.

Major Structures:

Structure ID	Existing	Proposed
301-0004-0	The existing bridge is 64-feet long and 26.5-feet wide with two 11-foot lanes and one-foot shoulders.	The proposed bridge is 85-feet long and 43'-3" wide with two 12-foot lanes and eight-foot shoulders.

Accelerated Bridge Construction (ABC) techniques anticipated: ☐ No ☒ Yes

The existing structurally deficient bridge will be replaced and widened to meet current design loading and shoulder width requirements. To reduce traffic impacts and onsite construction time, potential ABC techniques being considered include:

- Use of an off-site detour – The offsite detour option could save up to 12 months of road closure, allowing the contractor to complete construction quickly and safely.
- Use of an on-site detour (temporary bridge) – The on-site detour option could save approximately 6 months of road closure. It is not as effective as the off-site detour because of time required for construction and demolition of temporary bridge and stream impacts.
- Use of a single-span structure – The single-span structure option would only be considered if roadway profile changes can be minimized. Single span structures significantly reduce or eliminate stream impacts; however, if raising the roadway profile is required savings in road closure time must be weighed against additional impacts, cost, and construction time to support this technique.

Mainline Design Features: SR 16 @ Short Creek

Feature	Existing	Policy	Proposed
Typical Section			
- Number of Lanes	2		2
- Lane Width(s)	11 ft	11-12 ft	12 ft
- Median Width & Type	N/A	N/A	N/A
- Outside Shoulder Width	3 ft (1 ft paved)	10 ft (4 ft paved)	10 ft (4 ft paved)
- Outside Shoulder Width (Bridge)	1 ft	8 ft	8 ft
- Outside Shoulder Slope	8%	6%	6%
- Inside Shoulder Width	N/A	N/A	N/A
- Sidewalks	N/A	N/A	N/A
- Auxiliary Lanes	N/A		N/A
- Bike Accommodations	N/A	N/A	N/A
Posted Speed	55 MPH		55 MPH
Design Speed	55 MPH	55 MPH	55 MPH
Minimum Horizontal Curve Radius	N/A	1060 ft	N/A
Maximum Superelevation Rate	Normal Crown	6% or 8%	Normal Crown
Maximum Grade	4.8%	5%	5%
Access Control	Permitted	Permitted	Permitted
Design Vehicle	H-15	SU	WB-67/HL-93
Pavement Type	Asphalt		Asphalt

*According to current GDOT design policy if applicable

Is the project located on a NHS roadway? ☒ No ☐ Yes

Design Exceptions/Design Variances to GDOT and/or FHWA Controlling Criteria anticipated: None

Design Variances to GDOT Standard Criteria anticipated: None

Lighting required: ☒ No ☐ Yes

Off-site Detours Anticipated: ☐ No ☐ Undetermined ☒ Yes

If yes: Roadway type to be closed: ☐ Local Road ☒ State Route

Detour Route selected: ☐ Local Road ☒ State Route

District Concurrence w/Detour Route: ☐ No/Pending ☒ Received 9/12/18

Note: Received concurrence for Off-site Detour Route alternative from the District contingent on the public input from the PDOH comments.

Transportation Management Plan [TMP] Required: ☐ No ☒ Yes

If Yes: Project classified as: ☒ Non-Significant

TMP Components Anticipated: ☒ TTC

INTERCHANGES AND INTERSECTIONS

Major Interchanges/Intersections: None

Intersection Control Evaluation (ICE) Required: ☒ No ☐ Yes
Roundabout Peer Review Required: ☒ No ☐ Yes ☐ Completed – Date:

UTILITY AND PROPERTY

Railroad Involvement: N/A

Utility Involvements:
• ATT/D Telecom

SUE Required: ☒ No ☐ Yes

Public Interest Determination Policy and Procedure recommended? ☒ No ☐ Yes

Right-of-Way: Existing width: 80ft. Proposed width: 80ft.
Required Right-of-Way anticipated: ☒ None ☐ Yes ☐ Undetermined
Easements anticipated: ☐ None ☐ Temporary ☒ Permanent ☐ Utility ☐ Other

Anticipated total number of impacted parcels: 3
Displacements anticipated: Businesses: 0
Residences: 0
Other: 0
Total Displacements: 0

Impacts to USACE property anticipated? ☒ No ☐ Yes ☐ Undetermined

CONTEXT SENSITIVE SOLUTIONS

Issues of Concern: None

Context Sensitive Solutions Proposed: None

ENVIRONMENTAL AND PERMITS

County: Warren

Anticipated Environmental Document:

NEPA: ☐ PCE ☒ CE ☐ EA-FONSI
GEPA: ☐ Type A ☐ Type B ☐ None

Level of Environmental Analysis:

- ☒ The environmental considerations noted below are based on preliminary desktop or screening level environmental analysis and are subject to revision after the completion of resource identification, delineation, and agency concurrence.
- ☐ The environmental considerations noted below are based on the completion of resource identification, delineation, and agency concurrence.

Water Quality Requirements:

MS4 Compliance – Is the project located in an MS4 area? ☒ No ☐ Yes

Is Non-MS4 water quality mitigation anticipated? ☒ No ☐ Yes

Environmental Permits, Variances, Commitments, and Coordination anticipated: Section 404 and Georgia EPD Stream Buffer Variance

Air Quality:

Is the project located in an Ozone Non-attainment area? ☒ No ☐ Yes
 Carbon Monoxide hotspot analysis required? ☒ No ☐ Yes

NEPA/GEPA Comments & Information:

- **Ecology:** An Ecology Assessment of Effects is anticipated.
 - Protected Species – to be determined after field surveys
 - Critical Habitat – None
 - Protected Species Survey Reports – to be determined based on results of field verification and assessment of suitable habitat. Special Provisions may be required.
- **History:** A No Historic Properties Affected Report is anticipated.
- **Archaeology:** 1 precontact site identified. A Phase I report is anticipated. Phase II to be determined based on results of Phase I report.
- **Air:** Screening type report, no modeling
- **Noise Report:** Type III, no modeling
- **Public Detour Open House (PDOH):** A PDOH will be conducted if an offsite detour is required.

COORDINATION, ACTIVITIES, RESPONSIBILITIES, AND COSTS

Is Federal Aviation Administration (FAA) coordination anticipated? ☒ No ☐ Yes

Project Meetings: Kick-off Meeting – 12/6/2017

Alternatives Meeting – 3/20/2018

Concept Team Meeting – 5/16/2018

Public Detour Open House Meeting – November, 2018

Other coordination to date: Early Detour coordination via questionnaires and a detour map were provided to local stakeholders. Responses were received from the Emergency Management Agency (EMA) and the County Administration.

Project Activity	Party Responsible for Performing Task(s)
Concept Development	Moffatt & Nichol
Design	Moffatt & Nichol
Right-of-Way Acquisition	GDOT

County: Warren

Utility Coordination (Preconstruction)	GDOT
Utility Relocation (Construction)	Utility Owners
Letting to Contract	GDOT
Construction Supervision	GDOT
Providing Material Pits	Contractor
Providing Detours	Contractor
Environmental Studies, Documents, & Permits	CALYX, Ecological Solutions, VHB
Environmental Mitigation	GDOT
Construction Inspection & Materials Testing	GDOT

Project Cost Estimate and Funding Responsibilities:

	PE Activities		ROW**	Reimbursable Utilities	CST*	Total Cost
	PE Funding	Section 404 Mitigation				
Funded By	GDOT	GDOT	GDOT	GDOT	GDOT	
\$ Amount	\$981,568.86	\$0	TBD	\$0	\$1,410,481.29	\$2,392,050.15
Date of Estimate	12/9/2016	7/13/2018	N/A	5/16/2018	10/23/2018	

*CST Cost includes: Construction, Engineering and Inspection, Contingencies and Liquid AC Cost Adjustment.

**Programming level cost provided = \$59,400, ROW estimate requested on 4/18/18. ROW costs will be updated upon receipt of estimate from ROW office.

ALTERNATIVES DISCUSSION

Preferred Alternative C: This alternative includes reconstruction on the existing alignment accomplished by means of an off-site detour and will involve the replacement of the existing substandard 64-foot long bridge with a proposed 85-foot long bridge.			
Estimated Property Impacts:	2	Estimated Total Cost:	\$2,426,318.15
Estimated ROW Cost:	\$34,268 ***	Estimated CST Time:	12 months
Rationale: This alternative is preferred because of the cost and time savings and lesser impacts of the project through the use of an off-site detour with a net length of 19 miles. This recommended off-site detour, which is east of the project, is a State Route only detour. Bridges along this route are not posted for weight restrictions. A shorter local route, no trucks, was also provided on the detour map via Jewell Road and Mitchell Road, an approximate net increase length of 2 miles. During bridge closure, access to New Salem Baptist Church will be impacted on the north end of the bridge. Early coordination with the Emergency Management Agency (EMA) and the County Administration suggest that there is moderate to high impact if the bridge were to be closed for up to a year. County Administration is concerned about excessive wear and tear on the county roads from state route traffic using county roads as a detour. This option will impact three parcels but will reduce the construction limits to the north and south resulting in the lower project cost.			

***GDOT ROW Estimate Cost requested on 4/18/18; Estimated ROW Cost provided by the Consultant

No-Build Alternative: No Build			
Estimated Property Impacts:	0	Estimated Total Cost:	\$0
Estimated ROW Cost:	\$0	Estimated CST Time:	0 months
Rationale: This alternative was rejected because it does not achieve the improved safety condition by replacement of the aging and deficient structure that is proposed in the project justification statement.			

Alternative A: This alternative includes a parallel alignment to the southeast and will involve the replacement of the existing substandard 64-foot long bridge with a proposed 85-foot bridge.			
Estimated Property Impacts:	3	Estimated Total Cost:	\$3,045,845.92
Estimated ROW Cost:	\$53,329 ***	Estimated CST Time:	24 months
Rationale: Shifting the roadway further to the southeast will impact three parcels and would allow the existing roadway and bridge to remain open during construction but would extend the construction limits by approximately one-half mile to the south and an even greater distance to the north due to the existing curve. The construction cost is higher for asphalt realignment to the new bridge location.			

***GDOT ROW Estimate Cost requested on 4/18/18; Estimated ROW Cost provided by the Consultant

Alternative B: This alternative includes a parallel alignment to the northwest and will involve the replacement of the existing substandard 64-foot long bridge with a proposed 85-foot bridge.			
Estimated Property Impacts:	1	Estimated Total Cost:	\$2,945,070.19
Estimated ROW Cost:	\$23,355 ***	Estimated CST Time:	24 months
Rationale: Shifting the roadway to the northwest will impact one parcel and would allow the existing roadway and bridge to remain open during construction but would extend the construction limits by approximately one-quarter mile to the south and an even greater distance to the north due to the existing curve. This parallel alignment would also require the relocation of AT&T aerial and buried fiber optic cable on the northwestern side of the existing bridge. The construction cost is higher for asphalt realignment to the new bridge location.			

***GDOT ROW Estimate Cost requested on 4/18/18; Estimated ROW Cost provided by the Consultant

Additional Comments/ Information: This project is part of the Warren County – Piedmont Scenic Byway Extension

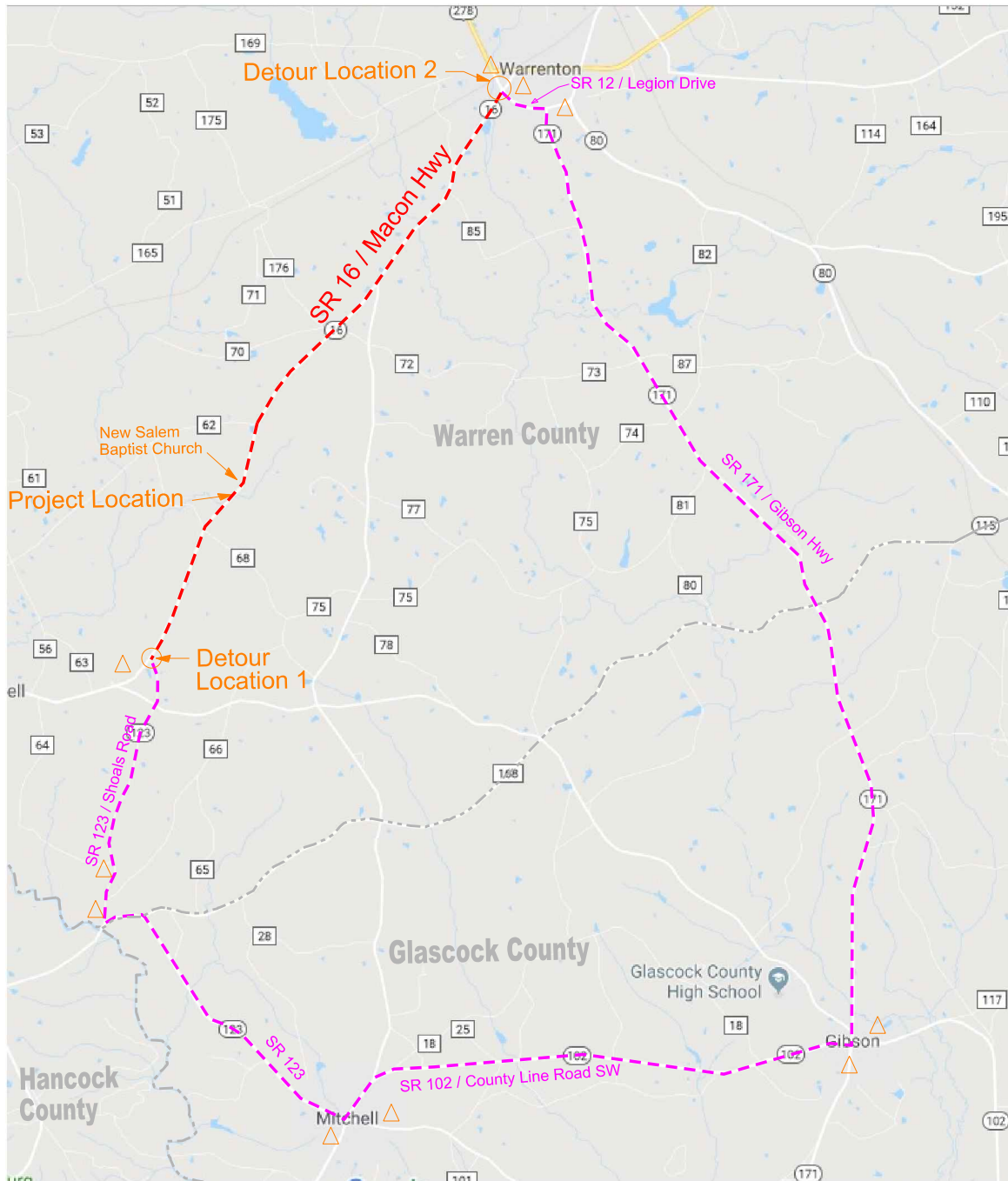
LIST OF ATTACHMENTS/SUPPORTING DATA

1. Concept Layout
 - a. Preferred Alternative
 - b. Detour Map
2. Typical Sections
3. Detailed Cost Estimates:
 - a. Construction including Engineering and Inspection and Contingencies
 - b. Completed Liquid AC Cost Adjustment forms
 - c. Right-of-Way (by Consultant)
 - d. Utilities
 - e. Section 404 Mitigation
4. Concept Utility Report
5. Approved Bridge Traffic Memo
6. S I & A Report
7. Meeting Minutes
 - a. Kick-off Meeting
 - b. Alternatives Meeting
 - c. Concept Team Meeting



				REVISION DATES			CONCEPT LAYOUT ALT C DETOUR OPTION			
							CHECKED:		DATE:	DRAWING No.
							BACKCHECKED:		DATE:	
							CORRECTED:		DATE:	
							VERIFIED:		DATE:	





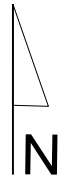
Interrupted Route Details State Road Route

From the North

SR 12 / Legion Drive
SR 171 / Gibson Highway
SR 102 / County Line Road SW
SR 123
SR 123 / Shoals Road

From the South

SR 123 / Shoals Road
SR 123
SR 102 / County Line Road SW
SR 171 / Gibson Highway
SR 12 / Legion Drive








Distance from Detour Location 1 to Detour Location 2 is currently 8.5 Miles.

Distance from Detour Location 1 to Detour Location 2 using the Detour Route is 27.5 Miles, an increase of 19 miles.

Schools, churches, institutions impacted:
New Salem Baptist Church is on the north side of the project.

Substandard or load posted bridges on the detour routes: None

-  - Main Detour Point
-  - Location of Other Advisory Detour Signs
-  - County Line
-  - Detour Route
-  - Interrupted Route

PI No. 0007057, Warren County
For SR 16 Bridge #301-0004-0

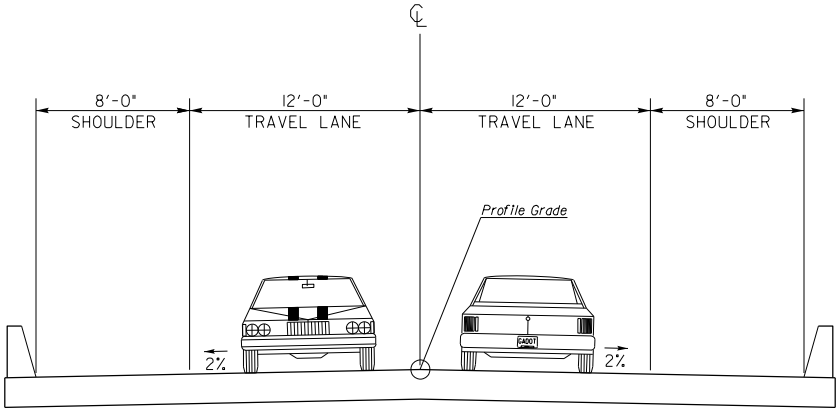
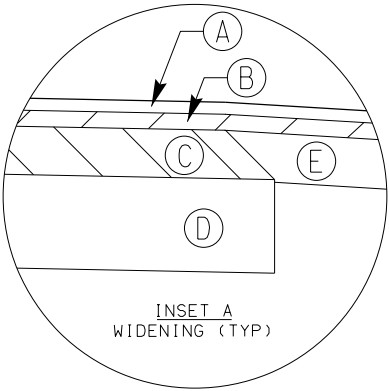
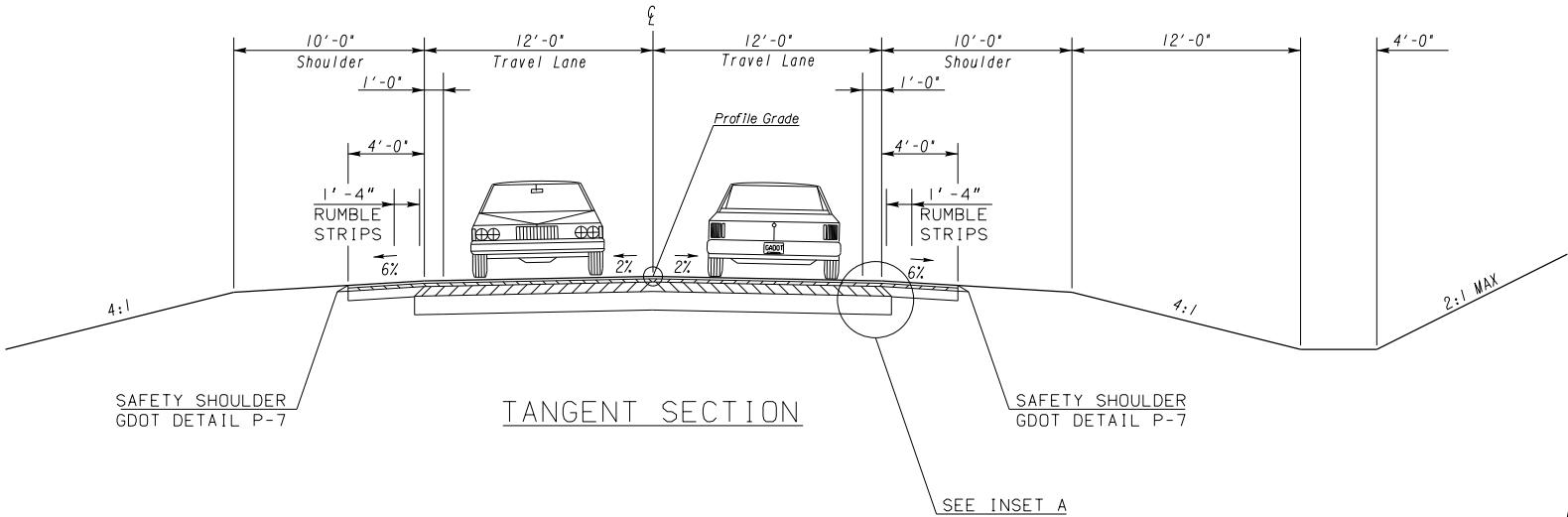
Proposed Detour Route Map



moffatt & nichol

Oct 16, 2018

⌘ REFER TO GDOT DETAIL S-4
WHERE GUARDRAIL IS SHOWN
ON PLAN VIEW.



- PAVEMENT DESIGN
- A 135 LB/SY RECYCLED ASPH CONC 9.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME
 - B 220 LB/SY RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME
 - C 550 LB/SY RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME
 - D 10" GRADED AGGREGATE BASE
 - E 6" GRADED AGGREGATE BASE

REVISION DATES

TYPICAL SECTIONS

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	05- 001
CORRECTED:	DATE:	
VERIFIED:	DATE:	

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE P.I. No. **0007057** **OFFICE** Program Delivery

PROJECT DESCRIPTION
SR 16 @ Short Creek, Warren County

DATE October 23, 2018

From: Kimberly Nesbitt, State Program Delivery Administrator

To: Lisa L. Myers, State Project Review Engineer
via Email Mailbox: CostEstimatesandUpdates@dot.ga.gov

Subject: REVISIONS TO PROGRAMMED COSTS

PROJECT MANAGER Mindy Sanders

MGMT LET DATE 2/15/2021

MGMT ROW DATE 3/12/2020

PROGRAMMED COSTS (TPro W/OUT INFLATION)

LAST ESTIMATE UPDATE

CONSTRUCTION \$ 1,183,505.56

DATE 6/29/2018

RIGHT OF WAY \$ 59,400.00

DATE 5/25/2017

UTILITIES \$

DATE

REVISED COST ESTIMATES

CONSTRUCTION* \$ 1,410,481.29

RIGHT OF WAY \$ Requested 4/18/18

UTILITIES \$ 0.00

*Cost Contains **10** % Contingency

REASONS FOR COST INCREASE AND CONTINGENCY JUSTIFICATION:

The construction cost estimate has been updated to reflect the preferred concept using current pay item costs. The contingency is set to 10% based on low identified risks. Right of way and utility cost estimate updates are forthcoming.

CONTINGENCY SUMMARY

A. CONSTRUCTION COST ESTIMATE:	\$ 1,212,107.51	Base Estimate From CES	
B. ENGINEERING AND INSPECTION (E & I):	\$ 60,605.38	Base Estimate (A) x	5 %
C. CONTINGENCY:	\$ 127,271.29	Base Estimate (A) + E & I (B) x	10 %
		See % Table in "Risk Based Cost Estimation" Memo	
D. TOTAL LIQUID AC ADJUSTMENT:	\$ 10,497.12	Total From Liquid AC Spreadsheet	
E. CONSTRUCTION TOTAL:	\$ 1,410,481.29	(A + B + C + D = E)	

REIMBURSABLE UTILITY COSTS

UTILITY OWNER	REIMBURSABLE COST
	\$ -
	\$ -
	\$ -
	\$ -
TOTAL	\$ -

ATTACHMENTS: (File Copy in the Project Cost Estimate Folder)

Detailed Cost Estimate Printout From TRAQS
Liquid AC Adjustment Spreadsheet

Consultant Validation of Final QC/QA for Construction Cost Estimate Used in This Revision To Programmed Costs

COMPANY NAME: Moffatt & Nichol

VALIDATION OF FINAL QC/QA

PRINTED NAME: Darren Wilton, PE

TITLE: Project Manager

SIGNATURE:

Darren J. Wilton

DATE: 10/23/2018

STATE HIGHWAY AGENCY

DATE : 10/23/2018

PAGE : 1

JOB ESTIMATE REPORT

JOB NUMBER : 0007057 ALT C SPEC YEAR: 13
 DESCRIPTION: SR 16 AT SHORT CREEK

ITEMS FOR JOB 0007057 ALT C

LINE	ITEM	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0005	150-1000	LS	TRAFFIC CONTROL - 0007057	1.000	60000.00	60000.00
0009	153-1300	EA	FIELD ENGINEERS OFFICE TP 3	1.000	102569.60	102569.60
0010	210-0100	LS	GRADING COMPLETE - 0007057	1.000	100000.00	100000.00
0015	163-0232	AC	TEMPORARY GRASSING	3.000	512.75	1538.26
0020	163-0240	TN	MULCH	16.000	324.53	5192.54
0025	163-0300	EA	CONSTRUCTION EXIT	2.000	1592.34	3184.69
0030	163-0503	EA	CONSTR AND REMOVE SILT CONTROL GATE,TP 3	1.000	596.12	596.12
0035	163-0527	EA	CNST/REM RIP RAP CKDM,STN P RIPRAP/SN BG	15.000	380.40	5706.12
0040	163-0550	EA	CONS & REM INLET SEDIMENT TRAP	2.000	212.46	424.94
0045	165-0030	LF	MAINT OF TEMP SILT FENCE, TP C	1550.000	0.91	1416.90
0050	165-0041	LF	MAINT OF CHECK DAMS - ALL TYPES	150.000	11.26	1690.11
0055	165-0087	EA	MAINT OF SILT CONTROL GATE, TP 3	1.000	170.39	170.39
0060	165-0101	EA	MAINT OF CONST EXIT	2.000	664.01	1328.04
0065	165-0105	EA	MAINT OF INLET SEDIMENT TRAP	2.000	80.38	160.77
0070	167-1000	EA	WATER QUALITY MONITORING AND SAMPLING	4.000	304.14	1216.60
0075	167-1500	MO	WATER QUALITY INSPECTIONS	12.000	702.19	8426.35
0080	171-0030	LF	TEMPORARY SILT FENCE, TYPE C	3100.000	4.05	12583.55
0090	310-1101	TN	GR AGGR BASE CRS, INCL MATL	764.000	39.92	30498.88
0095	402-1812	TN	RECYL AC LEVELING,INCL BM&HL	40.000	115.09	4603.94
0100	402-3121	TN	RECYL AC 25MM SP, GP1/2, BM&HL	248.000	110.33	27361.84
0105	402-3103	TN	REC AC 9.5 MM SP, TP11,GP2, INCL BM&BL	128.000	109.34	13995.52
0110	402-3190	TN	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	206.000	114.03	23490.18
0115	413-0750	GL	TACK COAT	125.000	2.27	283.75
0124	432-5010	SY	MILL ASPH CONC PVMT, VARB DEPTH	760.000	9.01	6852.95
0125	433-1200	SY	REF CONC APPR SL/I SLOPED EDGE	281.000	187.65	52730.25
0128	441-0301	EA	CONC SPILLWAY, TP 1	2.000	2163.04	4326.09
0129	456-2015	GLM	INDENT. RUMB. STRIPS - GRND-IN-PL	0.118	1553.71	183.34
0134	540-1101	LS	REM OF EX BR, STA NO - 0007057	1.000	76320.00	76320.00
0139	543-9000	LS	CONSTR OF BRIDGE COMPLETE - 0007057	1.000	459600.00	459600.00
0144	550-1180	LF	STM DR PIPE 18,H 1-10	60.000	74.61	4477.14
0149	550-4218	EA	FLARED END SECT 18 IN, ST DR	2.000	632.67	1265.35
0158	576-1015	LF	SLOPE DRAIN PIPE, 15 IN	65.000	39.92	2594.80
0159	603-2181	SY	STN DUMPED RIP RAP, TP 3, 18	200.000	50.81	10163.86
0164	603-2024	SY	STN DUMPED RIP RAP, TP 1, 24	2200.000	53.03	116670.07
0169	603-7000	SY	PLASTIC FILTER FABRIC	2400.000	4.18	10049.26
0174	632-0003	EA	CHANGEABLE MESS SIGN, PORT, TP 3	2.000	9388.76	18777.52
0179	636-1036	SF	HWY SGN, TP1MAT, REFL SH TP 11	30.000	18.11	543.30
0184	636-2070	LF	GALV STEEL POSTS, TP 7	80.000	9.40	752.16
0189	641-1100	LF	GUARDRAIL, TP T	60.000	79.42	4765.38
0194	641-1200	LF	GUARDRAIL, TP W	325.000	21.24	6903.18
0199	641-5001	EA	GUARDRAIL ANCHORAGE, TP 1	2.000	972.41	1944.82
0204	641-5015	EA	GUARDRL ANCHOR, TP 12A, 31 IN, TANG, E/A	2.000	2878.58	5757.16
0209	643-8200	LF	BARRIER FENCE (ORANGE), 4 FT	1250.000	2.03	2548.24
0214	653-1501	LF	THERMO SOLID TRAF ST 5 IN, WHI	800.000	1.72	1376.00
0219	653-1502	LF	THERMO SOLID TRAF ST, 5 IN YEL	800.000	1.60	1280.00
0224	654-1001	EA	RAISED PVMT MARKERS TP 1	26.000	6.62	172.13
0229	657-1085	LF	PRF PL SD PVT MKG, 8, B/W, TP PB	170.000	8.53	1450.10
0234	657-6085	LF	PRF PL SD PVMT MKG, 8, B/Y, TPPB	170.000	8.29	1409.30
0239	700-6910	AC	PERMANENT GRASSING	3.000	1297.38	3892.15
0244	700-7000	TN	AGRICULTURAL LIME	16.000	133.42	2134.78
0249	700-8000	TN	FERTILIZER MIXED GRADE	4.000	651.91	2607.65
0254	700-8100	LB	FERTILIZER NITROGEN CONTENT	245.000	3.41	837.76
0259	716-2000	SY	EROSION CONTROL MATS, SLOPES	2477.000	1.32	3283.68

ESTIMATED COST:	1212107.51
CONTINGENCY PERCENT (0.0):	0.00
ESTIMATED TOTAL:	1212107.51

PROJ. NO. N/A
P.I. NO. 0007057
DATE 10/23/2018

CALL NO. 0/00/2016

INDEX (TYPE)	DATE	INDEX
REG. UNLEADED	Oct-18	\$ 2.724
DIESEL		\$ 3.126
LIQUID AC		\$ 553.00

Link to AC Index:
<http://www.dot.ga.gov/PS/Materials/AsphaltFuelIndex>

LIQUID AC ADJUSTMENTS

PA=[((APM-APL)/APL)]xTMTxAPL

Asphalt

Price Adjustment (PA)				10318.98	\$	10,318.98
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	884.80		
Monthly Asphalt Cement Price month project let (APL)			\$	553.00		
Total Monthly Tonnage of asphalt cement (TMT)				31.1		

ASPHALT	Tons	%AC	AC ton
Leveling	40	5.0%	2
12.5 OGFC		5.0%	0
12.5 mm		5.0%	0
9.5 mm SP	128	5.0%	6.4
25 mm SP	248	5.0%	12.4
19 mm SP	206	5.0%	10.3
	622		31.1

BITUMINOUS TACK COAT

Price Adjustment (PA)				178.14	\$	178.14
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	884.80		
Monthly Asphalt Cement Price month project let (APL)			\$	553.00		
Total Monthly Tonnage of asphalt cement (TMT)				0.536887615		

Bitum Tack

Gals	gals/ton	tons
125	232.8234	0.53688762

BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA)				0	\$	-
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	884.80		
Monthly Asphalt Cement Price month project let (APL)			\$	553.00		
Total Monthly Tonnage of asphalt cement (TMT)				0		

Bitum Tack	SY	Gals/SY	Gals	gals/ton	tons
Single Surf. Trmt.		0.20	0	232.8234	0
Double Surf.Trmt.		0.44	0	232.8234	0
Triple Surf. Trmt		0.71	0	232.8234	0

TOTAL LIQUID AC ADJUSTMENT \$ **10,497.12**

Concept ROW Cost Estimate

PI No. 0007057

Project Name: SR 16 at Short Creek, Preferred Alternative

Date: 10/30/2018

Land and Improvements	Agriculture	Residential	Commercial	Industrial	Notes
Estimate (\$/ac)	\$1,200	\$0	\$0	\$0	Enter Cost / Acre
Fee Simple Area (ac)	0.00	0.00	0.00	0.00	Enter Acreage
Fee Simple Estimate	\$0	\$0	\$0	\$0	CALCULATED FIELD
Perm Easement Area (ac)	0.23	0.00	0.00	0.00	Enter Acreage
Perm Easement Factor	75%	75%	75%	75%	Adjust Percentage as Appropriate
Perm Easement Estimate	\$207	\$0	\$0	\$0	CALCULATED FIELD
Temp Easement Area (ac)	0.00	0.00	0.00	0.00	Enter Acreage
Temp Easement Factor	50%	50%	50%	50%	Adjust Percentage as Appropriate
Temp Easement Estimate	\$0	\$0	\$0	\$0	CALCULATED FIELD
City Land Available for Swap (ac)	0.00	0.00	0.00	0.00	Enter Acreage (If required)
City Land Available for Swap Estimate	\$0	\$0	\$0	\$0	Enter Estimated Value (If required)
Proximity Damages	\$0	\$0	\$0	\$0	Enter Fees and Provide Notes as Appropriate
Consequential Damages	\$0	\$0	\$0	\$0	Enter Fees and Provide Notes as Appropriate
Cost to Cures	\$0	\$0	\$0	\$0	Enter Fees and Provide Notes as Appropriate
Improvements	\$0	\$0	\$0	\$0	Enter Fees and Provide Notes as Appropriate
Trade Fixtures	\$0	\$0	\$0	\$0	Enter Fees and Provide Notes as Appropriate

PROPERTY TYPE TOTALS **\$207** **\$0** **\$0** **\$0** CALCULATED FIELD

Land and Improvements Sub Total **\$207** CALCULATED FIELD

Relocation	Quantity	Estimated Cost	Totals	
Residential Tenant (Qty of Tenants)	0	\$30,000	\$0	Adjust Qty / Costs as required
Residential Owner	0	\$50,000	\$0	Adjust Qty / Costs as required
Business Displacement (Qty)	0	\$45,000	\$0	Adjust Qty / Costs as required
Pro Rata Taxes	0	\$1,000	\$0	Adjust Qty / Costs as required
Prop Pin Replacement	0	\$1,250	\$0	Adjust Qty / Costs as required

PROPERTY TYPE TOTALS **0** **\$0** CALCULATED FIELD

Relocation Sub Total **\$0** CALCULATED FIELD

Valuation Services	Agriculture	Residential	Commercial	Industrial	
Appraisals (# of Parcels)	2	0	0	0	Adjust Parcels as required
Estimated Fee (per Parcel)	\$2,500	\$2,500	\$2,000	\$2,000	Enter Estimated Fee per Parcel
Total Appraisals	\$5,000	\$0	\$0	\$0	CALCULATED FIELD
Specialty Reports	\$0	\$0	\$0	\$0	Enter Estimated Costs and Provide Notes
Estimated Fees	\$0	\$1,500	\$1,500	\$0	Enter Estimated Fees and Provide Notes

PROPERTY TYPE TOTALS **\$5,000** **\$1,500** **\$1,500** **\$0** CALCULATED FIELD

Valuation Services Sub Total **\$8,000** CALCULATED FIELD

Legal Services	Parcels	Estimated Fees	Totals	
Meeting with Attorney	2	\$125	\$250	Adjust Parcels / Fees as required (using best judgement)
Preliminary Titles	2	\$200	\$400	Adjust Parcels / Fees as required
Closing and Final Title	2	\$300	\$600	Adjust Parcels / Fees as required
Recording Fees	2	\$50	\$100	Adjust Parcels / Fees as required
Condemnation	0	\$30,000	\$0	Adjust Parcels / Fees as required

Legal Services Sub Total **\$1,350** CALCULATED FIELD

Administrative	Parcels	Man Hours/Parcel	Totals	
Pre-Acquisition	2	40	\$4,000	Adjust Parcels / Fees as required
Acquisition	2	100	\$10,000	Adjust Parcels / Fees as required
Administrative Appeals	2	50	\$5,000	Calculates as 15% of Acq Parcel Count (Adjust if Necessary)

Administrative Sub Total **\$19,000** CALCULATED FIELD

Contingency			
Overall Contingency	20%	\$5,711	Enter Percentage for Contingency (Default = 20%)

Total Estimated Costs **\$34,268** CALCULATED FIELD

Concept ROW Cost Estimate

PI No. 0007057

Project Name: SR 16 at Short Creek, ALT A

Date: 05/30/2018

Land and Improvements	Agriculture	Residential	Commercial	Industrial	Notes
Estimate (\$/ac)	\$1,200	\$0	\$0	\$0	Enter Cost / Acre
Fee Simple Area (ac)	2.85	0.00	0.00	0.00	Enter Acreage
Fee Simple Estimate	\$3,416	\$0	\$0	\$0	CALCULATED FIELD
Perm Easement Area (ac)	0.00	0.00	0.00	0.00	Enter Acreage
Perm Easement Factor	50%	50%	50%	50%	Adjust Percentage as Appropriate
Perm Easement Estimate	\$0	\$0	\$0	\$0	CALCULATED FIELD
Temp Easement Area (ac)	0.00	0.00	0.00	0.00	Enter Acreage
Temp Easement Factor	25%	25%	25%	25%	Adjust Percentage as Appropriate
Temp Easement Estimate	\$0	\$0	\$0	\$0	CALCULATED FIELD
City Land Available for Swap (ac)	0.00	0.00	0.00	0.00	Enter Acreage (If required)
City Land Available for Swap Estimate	\$0	\$0	\$0	\$0	Enter Estimated Value (If required)
Proximity Damages	\$0	\$0	\$0	\$0	Enter Fees and Provide Notes as Appropriate
Consequential Damages	\$0	\$0	\$0	\$0	Enter Fees and Provide Notes as Appropriate
Cost to Cures	\$0	\$0	\$0	\$0	Enter Fees and Provide Notes as Appropriate
Improvements	\$0	\$0	\$0	\$0	Enter Fees and Provide Notes as Appropriate
Trade Fixtures	\$0	\$0	\$0	\$0	Enter Fees and Provide Notes as Appropriate

PROPERTY TYPE TOTALS **\$3,416** **\$0** **\$0** **\$0** CALCULATED FIELD

Land and Improvements Sub Total **\$3,416** CALCULATED FIELD

Relocation	Quantity	Estimated Cost	Totals	
Residential Tenant (Qty of Tenants)	0	\$30,000	\$0	Adjust Qty / Costs as required
Residential Owner	0	\$50,000	\$0	Adjust Qty / Costs as required
Business Displacement (Qty)	0	\$45,000	\$0	Adjust Qty / Costs as required
Pro Rata Taxes	0	\$1,000	\$0	Adjust Qty / Costs as required
Prop Pin Replacement	0	\$1,250	\$0	Adjust Qty / Costs as required

PROPERTY TYPE TOTALS **0** **\$0** CALCULATED FIELD

Relocation Sub Total **\$0** CALCULATED FIELD

Valuation Services	Agriculture	Residential	Commercial	Industrial	
Appraisals (# of Parcels)	3	0	0	0	Adjust Parcels as required
Estimated Fee (per Parcel)	\$2,500	\$2,500	\$2,000	\$2,000	Enter Estimated Fee per Parcel
Total Appraisals	\$7,500	\$0	\$0	\$0	CALCULATED FIELD
Specialty Reports	\$0	\$0	\$0	\$0	Enter Estimated Costs and Provide Notes
Estimated Fees	\$0	\$1,500	\$1,500	\$0	Enter Estimated Fees and Provide Notes

PROPERTY TYPE TOTALS **\$7,500** **\$1,500** **\$1,500** **\$0** CALCULATED FIELD

Valuation Services Sub Total **\$10,500** CALCULATED FIELD

Legal Services	Parcels	Estimated Fees	Totals	
Meeting with Attorney	3	\$125	\$375	Adjust Parcels / Fees as required (using best judgement)
Preliminary Titles	3	\$200	\$600	Adjust Parcels / Fees as required
Closing and Final Title	3	\$300	\$900	Adjust Parcels / Fees as required
Recording Fees	3	\$50	\$150	Adjust Parcels / Fees as required
Condemnation	0	\$30,000	\$0	Adjust Parcels / Fees as required

Legal Services Sub Total **\$2,025** CALCULATED FIELD

Administrative	Parcels	Man Hours/Parcel	Totals	
Pre-Acquisition	3	40	\$6,000	Adjust Parcels / Fees as required
Acquisition	3	100	\$15,000	Adjust Parcels / Fees as required
Administrative Appeals	3	50	\$7,500	Calculates as 15% of Acq Parcel Count (Adjust if Necessary)

Administrative Sub Total **\$28,500** CALCULATED FIELD

Contingency			
Overall Contingency	20%	\$8,888	Enter Percentage for Contingency (Default = 20%)

Total Estimated Costs **\$53,329** CALCULATED FIELD

Concept ROW Cost Estimate

PI No. 0007057

Project Name: SR 16 at Short Creek, ALT B

Date: 05/30/2018

Land and Improvements	Agriculture	Residential	Commercial	Industrial	Notes
Estimate (\$/ac)	\$1,100	\$0	\$0	\$0	Enter Cost / Acre
Fee Simple Area (ac)	3.44	0.00	0.00	0.00	Enter Acreage
Fee Simple Estimate	\$3,788	\$0	\$0	\$0	CALCULATED FIELD
Perm Easement Area (ac)	0.00	0.00	0.00	0.00	Enter Acreage
Perm Easement Factor	50%	50%	50%	50%	Adjust Percentage as Appropriate
Perm Easement Estimate	\$0	\$0	\$0	\$0	CALCULATED FIELD
Temp Easement Area (ac)	0.00	0.00	0.00	0.00	Enter Acreage
Temp Easement Factor	25%	25%	25%	25%	Adjust Percentage as Appropriate
Temp Easement Estimate	\$0	\$0	\$0	\$0	CALCULATED FIELD
City Land Available for Swap (ac)	0.00	0.00	0.00	0.00	Enter Acreage (If required)
City Land Available for Swap Estimate	\$0	\$0	\$0	\$0	Enter Estimated Value (If required)
Proximity Damages	\$0	\$0	\$0	\$0	Enter Fees and Provide Notes as Appropriate
Consequential Damages	\$0	\$0	\$0	\$0	Enter Fees and Provide Notes as Appropriate
Cost to Cures	\$0	\$0	\$0	\$0	Enter Fees and Provide Notes as Appropriate
Improvements	\$0	\$0	\$0	\$0	Enter Fees and Provide Notes as Appropriate
Trade Fixtures	\$0	\$0	\$0	\$0	Enter Fees and Provide Notes as Appropriate

PROPERTY TYPE TOTALS **\$3,788** **\$0** **\$0** **\$0** CALCULATED FIELD

Land and Improvements Sub Total **\$3,788** CALCULATED FIELD

Relocation	Quantity	Estimated Cost	Totals	
Residential Tenant (Qty of Tenants)	0	\$30,000	\$0	Adjust Qty / Costs as required
Residential Owner	0	\$50,000	\$0	Adjust Qty / Costs as required
Business Displacement (Qty)	0	\$45,000	\$0	Adjust Qty / Costs as required
Pro Rata Taxes	0	\$1,000	\$0	Adjust Qty / Costs as required
Prop Pin Replacement	0	\$1,250	\$0	Adjust Qty / Costs as required

PROPERTY TYPE TOTALS **0** **\$0** CALCULATED FIELD

Relocation Sub Total **\$0** CALCULATED FIELD

Valuation Services	Agriculture	Residential	Commercial	Industrial	
Appraisals (# of Parcels)	1	0	0	0	Adjust Parcels as required
Estimated Fee (per Parcel)	\$2,500	\$2,500	\$2,000	\$2,000	Enter Estimated Fee per Parcel
Total Appraisals	\$2,500	\$0	\$0	\$0	CALCULATED FIELD
Specialty Reports	\$0	\$0	\$0	\$0	Enter Estimated Costs and Provide Notes
Estimated Fees	\$0	\$1,500	\$1,500	\$0	Enter Estimated Fees and Provide Notes

PROPERTY TYPE TOTALS **\$2,500** **\$1,500** **\$1,500** **\$0** CALCULATED FIELD

Valuation Services Sub Total **\$5,500** CALCULATED FIELD

Legal Services	Parcels	Estimated Fees	Totals	
Meeting with Attorney	1	\$125	\$125	Adjust Parcels / Fees as required (using best judgement)
Preliminary Titles	1	\$200	\$200	Adjust Parcels / Fees as required
Closing and Final Title	1	\$300	\$300	Adjust Parcels / Fees as required
Recording Fees	1	\$50	\$50	Adjust Parcels / Fees as required
Condemnation	0	\$30,000	\$0	Adjust Parcels / Fees as required

Legal Services Sub Total **\$675** CALCULATED FIELD

Administrative	Parcels	Man Hours/Parcel	Totals	
Pre-Acquisition	1	40	\$2,000	Adjust Parcels / Fees as required
Acquisition	1	100	\$5,000	Adjust Parcels / Fees as required
Administrative Appeals	1	50	\$2,500	Calculates as 15% of Acq Parcel Count (Adjust if Necessary)

Administrative Sub Total **\$9,500** CALCULATED FIELD

Contingency			
Overall Contingency	20%	\$3,893	Enter Percentage for Contingency (Default = 20%)

Total Estimated Costs **\$23,355** CALCULATED FIELD

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE

Project No: N/A
County: Warren
P.I. #: 0007057

Office: Tennille - Utilities
Date: 5-16-2018

Description: *SR 16 at Short Creek, 6.5 miles Southwest of Warrenton – Alt C*



FROM James L. Lindsey, District Utilities Manager

TO Mindy Sanders, Project Manager

SUBJECT **PRELIMINARY UTILITY COST ESTIMATE**

A review of utilities located on the above referenced project has been conducted without a design concept.. Listed below is a breakdown of the anticipated reimbursable and non-reimbursable cost.

<u>Utility Owner</u>	<u>Reimbursable</u>	<u>Non- Reimbursable</u>	<u>Estimate Based on</u>
AT&T (Distribution)	\$0.00	\$6,810.00	On Site Assessment by GDOT
Total 0.00%	\$0.00	\$6,810.00	

Update All

Estimate is based on the best available information at the current stage, unforeseen prior rights information may be provided by the Utility Company at a later date that could cause some non-reimbursable costs to shift to the reimbursable cost column.

If additional information is needed, please contact Tonia Parker at 478-553-3386.

cc: Patrick Allen, P.E., State Utilities Administrator
Yulonda Pride-Foster, State Utilities Preconstruction Manager
Tonia Hinton, Utilities Preconstruction Specialist
Todd Price, P.E., District Preconstruction Manager

Wilton, Darren

From: David Smith <davidsmith@ecologicalsolutions.net>
Sent: Friday, July 13, 2018 12:06 PM
To: Wilton, Darren
Subject: PI 0007057, Warren County

Darren:

Based on the Detour option (Alt C), it does not appear that there will be any mitigation required for the project. This alternative looks like it will avoid all impacts to the stream that flows parallel to SR 16. The impacts associated with the replacement of the existing bridge should remain under 100 linear feet of stream and will not trigger required mitigation.

Thanks,

David W. Smith, CPESC
Ecological Solutions, Inc.
630 Colonial Park Drive, Suite 200
Roswell, GA 30075
Office: 770-998-7848 Ext. 107
Fax: 770-998-5606
Cell: 678-898-6868
www.ecologicalsolutions.net

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Concept Utility Report

Project Number: CSBRG-0007-00(057)

District: 2

County: Warren

Prepared By: Tonia Parker

P.I. # 0007057

Date: March 20, 2018

Project Description: SR 16 at Short Creek, 6.5 miles Southwest of Warrenton (Alt C)

The information provided herein has been gathered from Georgia811 and/or field visits and serves as an estimate.

Nothing contained in this report is to be used as a substitute for 1st Submission or SUE.

Are SUE services recommended? No Level: ☐A ☐B ☐C ☐D

Public Interest Determination (PID): ☐ Automatic ☐ Mandatory ☐ Consideration

☒ No Use ☐ Exempt

Is a separate utility funding phase recommended? No

Existing Facilities: AT&T - Aerial and Buried Fiber Optic Cable

Potential: Project (Schedule/Budget) Impacts: No

Capital Improvement Projects (Utilities) Anticipated in the Area: No

Project Specific Recommendations for Avoidance/Mitigation: No

Right of Way Coordination: No

Environmental Coordination: No

Additional Remarks: N/A

The following utilities have facilities within the project limits. Utilities have been located using Georgia811 and/or field visits.

[illegible]

Department of Transportation State of Georgia

INTERDEPARTMENT CORRESPONDENCE

FILE Warren County,
P.I. # 0007057 **OFFICE** Planning
DATE August 30, 2018

FROM Paul Tanner, State Transportation Planning Administrator

TO Kimberly Nesbitt, State Program Delivery Administrator
Attention: Mindy Sanders

SUBJECT **Reviewed** Design Traffic for bridge replacement on SR 16/Macon Highway
@ Short Creek in Warren County

We have reviewed the Design Traffic for the above project. The Design Traffic is approved. The approved Design Traffic is furnished in the attached documents: 0007057.SR 16 Traffic Data Report.180828.pdf

If you have any questions concerning this information, please contact Andre Washington at 404-631-1925.

Keith McCage
HNTB
Design Traffic Consultant to GDOT
404-946-5731

RPT/KAM

MEMORANDUM

Date: July 12, 2018

To: Georgia Department of Transportation, Office of Planning
Attention: Daniel Funk

From: R. Christopher Marsengill, PE, PTOE

Subject: Traffic Forecast for PI 0007057, Warren County, Bridge ID 301-0004-0
SR 16 / Macon Highway @ Short Creek

CC: Terry McKloski, AICP
Mindy Sanders, PE
Darren Wilton, PE

M&N Job No.: 10016-01

Moffatt & Nichol is furnishing Traffic Forecast for the above project as follows:

No Build = Build	2018 (Existing Year)	2022 (Base Year)	2024 (Base Year +2)	2042 (Design Year)	2044 (Design Year +2)
AADT	1,775	1,850	1,875	2,250	2,300
DDHV (AM/PM)	70 / 80	75 / 85	75 / 85	90 / 100	90 / 105
K% (AM/PM)	7% / 8%	Same as Existing Year			
D% (AM/PM)	57% / 55%				
24 HR. T% - S.U.	16.0%				
24 HR. T% - COMB.	7.0%				
24 HR. T% - TOTAL	23.0%				
T% - S.U. (AM/PM)	19.0% / 16.0%				
T% - COMB. (AM/PM)	4.0% / 6.5%				
T% - TOTAL (AM/PM)	23.0% / 22.5%				

Please contact R. Christopher Marsengill, PE, PTOE at cmarsengill@moffattnichol.com or 912-231-0044 with any questions regarding this information.

MEMORANDUM

To: Georgia Department of Transportation Office of Planning
Attention: Andre Washington

From: R. Christopher Marsengill, PE, PTOE

CC: Terry McKloski, AICP
Mindy Sanders, PE
Darren Wilton, PE

Date: July 12, 2018

Subject: Traffic Data Report
PI No. 0007057, Warren County – SR 16 / Macon Highway @ Short Creek

M&N Job No.: 10016-01

Introduction

This Georgia Department of Transportation (GDOT) project proposes replacing the SR 16 / Macon Highway bridge over Short Creek in Warren County, Structure ID 301-0004-0. The bridge was built in 1937 and consists of two spans of steel beams on concrete caps with steel piles. The bridge was designed using an H-15 vehicle, which is below current design standards. Due to the age of the structure, the structural integrity of the bridge pertaining to the design vehicle, and the unknown foundation of the substructure, replacement of this 80-year-old bridge is recommended.

There are no signalized or unsignalized intersections within the project limits. The project will not include new capacity or reconfiguration of the roadway.

Moffatt & Nichol (M&N) has prepared traffic forecasts in accordance with the requirements in the *GDOT Design Traffic Forecasting Manual, Version 1.3* dated January 25, 2018. M&N has prepared Existing Year, Base Year (project opening year, 2022), Base Year + 2 (2024), Design Year (Base Year + 20, 2042), and Design Year + 2 (2044) traffic forecasts. The No-Build scenario will be the same as Build scenario because the project does not add capacity or change the configuration of the roadway. All future traffic was forecasted at the Annual Average Daily Traffic (AADT) level by applying the growth rate to the Existing Year traffic. Future AADTs were utilized to calculate Design Hour Volumes (DHV) using appropriate factors for the percentage of traffic appearing in the peak hour (K) and the percentage of traffic traveling in a peak direction (D). All traffic was balanced throughout the corridor. The GDOT Office of Planning approved the traffic data collection plan in March 2018, and the traffic counts were conducted from April 11, 2018 to April 12, 2018. The approved count map is included as **Figure 1**.

This memorandum, the Traffic Data Report, includes the following:

- Traffic count data collection locations, detailed in **Figure 1**, and raw count data, located in **Appendix B**
- Existing 2018 Average Daily Traffic (ADT), Average Annual Daily Traffic (AADT), and Design Hour Traffic (DHV), located in **Table 2**
- The K and D factors calculated from the traffic counts, located in **Table 2**
- Peak hour and daily truck percentages split into single unit trucks (categories 4-7) and combo unit trucks (categories 8-13), located in **Table 3**
- Data to support the proposed growth factor to be used in forecasting future traffic
- Georgia Statewide model plots used for growth rate analysis located in **Appendix A**
- Traffic forecast based upon the recommended growth rate, located in **Table 5**

Existing Conditions

This existing SR 16 / Macon Highway is a 2-lane, undivided, rural minor arterial throughout the limits of the project. The bridge was built in 1937, and the deck is in fair condition with heavy cracking with efflorescence throughout. The superstructure is in fair condition with minor corrosion on all beams with heavy pitting and corrosion noted in the bearing areas. The substructure is in satisfactory condition with minor cracking in the concrete caps. This bridge is classified as having an unknown foundation and therefore could be at risk for scour. Due to the age of the structure, the structural integrity of the bridge pertaining to the design vehicle, and the unknown foundation of the substructure, replacement of this 80-year-old bridge is recommended.

Summary of Field Visit Observations

Field observations in the study area revealed nothing unusual about travel through the project limits. Pedestrian and bike traffic is nonexistent within the project limits.

Historical Traffic Volume Data

The GDOT count database includes one relevant traffic counter location within the project limits. **Table 1** summarizes actual count data available for count station 301-0136.

Table 1 - Historical Traffic Counts from GDOT Count Database

Station	Location	Year	AADT	Truck %
301-0136	Portable count station on SR 16 west of the bridge location	2016	1,840	27.0%
		2014	1,330	26.0%
		2012	1,450	17.9%

Existing Traffic Volumes and Truck Percentages

A 48-hour, directional class count was conducted from April 11, 2018 to April 12, 2018 at the location illustrated in **Figure 1**. The count was collected and analyzed in accordance with the *GDOT Design Traffic Forecasting Manual, Version 1.3* January 25, 2018, to develop the ADT, AADT, DHV, daily truck percentages, and truck peak hour percentages. The 48-hour count data was used to calculate an ADT,



and the GDOT Recommended 2016 Traffic Factors for “02 - Rural Minor Arterial” were applied to the ADT to generate the AADT. These factors included a Monthly Factor of 0.98 (April), and a Daily Factor of 0.99 for Tuesday and 0.98 Wednesday. The K factors were applied to the AADT to derive DHVs. Based on the counts, the peak hours (PH) begin at 07:00 AM (northbound) and 4:00 PM (southbound), and the PH volumes were used to calculate the peak hour factor (K) and the directional factor (D). The D factors were applied to the DHVs to derive a peak direction volume (DDHV), and to calculate a corresponding off-peak directional volume. **Table 2** summarizes the count data and calculated results.

Table 2: Existing Traffic Data and Calculations

ID	Begin Peak	NB	SB	Total	K	D	ADT	AADT	DHV	DDHV	Off-Peak
C1	7:00 AM	70	50	120	0.07	0.57	1,840	1,775	125	70	55
	4:00 PM	65	80	145	0.08	0.55			140	80	60

Truck percentages were calculated using the average of the 48-hour classification counts. The daily truck percentages were derived for truck classes 4-7 (single unit trucks) and classes 8-13 (combo unit trucks), and total truck percentage is all classes 4-13. Truck percentages for the same classification scheme were extracted from the peak hours to derive the peak hour truck percentages. **Table 3** summarizes the existing truck data for the corridor.

Table 3: Existing Truck Data

ID	Begin Peak	Peak-Hour Trucks			Daily Trucks		
		SU	COMB	Total	SU	COMB	Total
C1	7:00 AM	19.0%	4.0%	23.0%	16.0%	7.0%	23.0%
	4:00 PM	16.0%	6.5%	22.5%			

Growth Rate Methodology

GDOT Historical Traffic Volume Data Growth

GDOT collects annual traffic counts statewide which can be utilized to calculate historical growth trends. Based on trends calculated from the count stations in **Table 1**, Station number 301-0136 shows a growth rate of 17.62% when trending between the years of 2014 and 2016. When comparing the 2016 historic data to the April 2018 count data in **Table 3**, the calculated growth rate is -7.48%. Neither of these rates seems reasonable given the characteristics of this corridor. According to GDOT District 1 Traffic Operations, there is no significant development pending in the vicinity of the proposed project that would support a growth rate of 17.62%. Further, a projected 7.48% decrease in traffic volumes also seems unreasonable. Therefore, the growth rates calculated from the historic traffic data volumes do not appear to be reliable.

Georgia Governor's Office of Planning and Budget Population Growth

The most recent census for Warren County Georgia is the 2010 census, which reports a counted population of 5,834. The US Census Bureau's Population Estimates Program for 2017 estimated a population of 5,303 for Warren County, an overall decrease of 9%, which translates to approximately 1.35% per year. Further research shows that this trend is expected to continue through the Design Year and Design Year + 2. Data obtained from the Georgia Governor's Office of Planning and Budget shows a



population decrease between -0.83% and -1.02% per year. **Table 4** displays the Georgia Governor's Office of Planning and Budget population projections for Warren county and the per year growth rate forecasted. However, there is evidence that this corridor is used by populations outside of Warren County, and a decrease in traffic volumes is not anticipated.

Table 4: Warren County Population Projection

YEAR	2018	2022	2024	2040	2045
Population	5,317	5,143	5,054	4,329	4,112
Growth Rate		-0.83%	-0.87%	-0.96%	-1.02%

Georgia Statewide Travel Demand Model

The Georgia Statewide Travel Demand Model (GSTDM) was also used to help estimate a corridor growth rate. For the 2010 base year network and the 2040 existing + committed loaded networks, the GSTDM demonstrates a growth rate of 0.79% south of the project and 1.16% north of the project. Averaging these rates yields a growth rate of 0.98%. **Appendix A** includes the GSTDM network plots and growth rate analysis.

M&N proposes a growth rate of 1.0% for this bridge replacement project based on the GSTDM projections and the project corridor characteristics.

Review Process and Next Steps

M&N is submitting this traffic memorandum to the GDOT Office of Planning for review and concurrence. **Table 5** is included in a Traffic Forecast Memo attached to this submittal for consideration if the proposed projection methodology is approved. The recommended growth rate of 1.0% was applied to the 2018 existing traffic to develop the Base Year (project opening year - 2022), Base Year+2 (2024), Design Year (Base Year+20 - 2042), and Design Year+2 (2044) daily and peak hour traffic forecasts for a Build Scenario.

Table 5: Traffic Forecast

No Build = Build	2018 (Existing Year)	2022 (Base Year)	2024 (Base Year +2)	2042 (Design Year)	2044 (Design Year +2)
AADT	1,775	1,850	1,875	2,250	2,300
DDHV (AM/PM)	70 / 80	75 / 85	75 / 85	90 / 100	90 / 105
K% (AM/PM)	7% / 8%				
D% (AM/PM)	57% / 55%				
24 HR. T% - S.U.	16.0%				
24 HR. T% - COMB.	7.0%				
24 HR. T% - TOTAL	23.0%				
T% - S.U. (AM/PM)	19.0% / 16.0%				
T% - COMB. (AM/PM)	4.0% / 6.5%				
T% - TOTAL (AM/PM)	23.0% / 22.5%				





PI No. 0007057, Warren County
For SR 16 Bridge #301-0004-0

Figure 1: Traffic Count Location Map

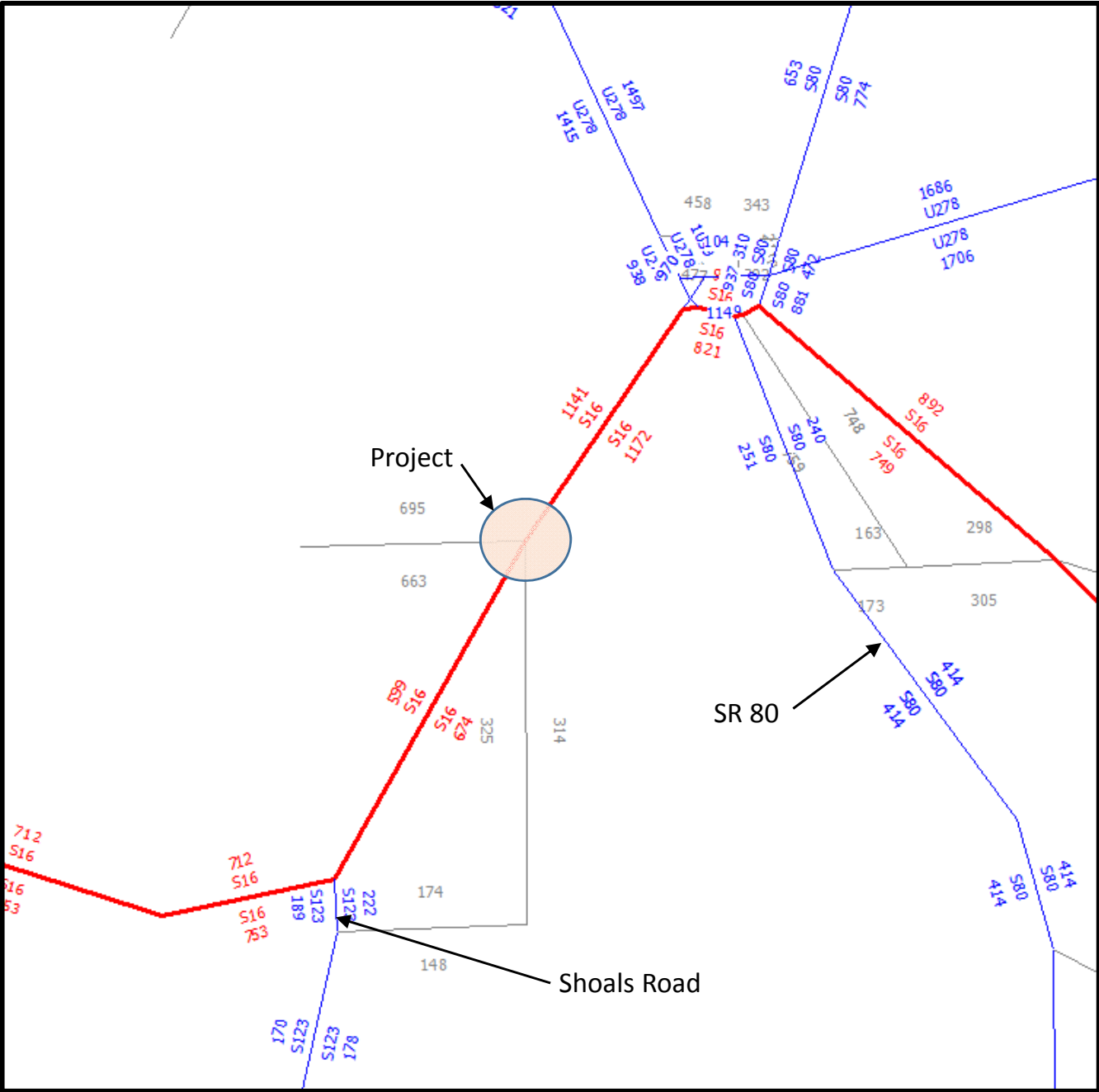
Appendix A

Georgia Statewide Travel Demand Model

Growth Rate Analysis



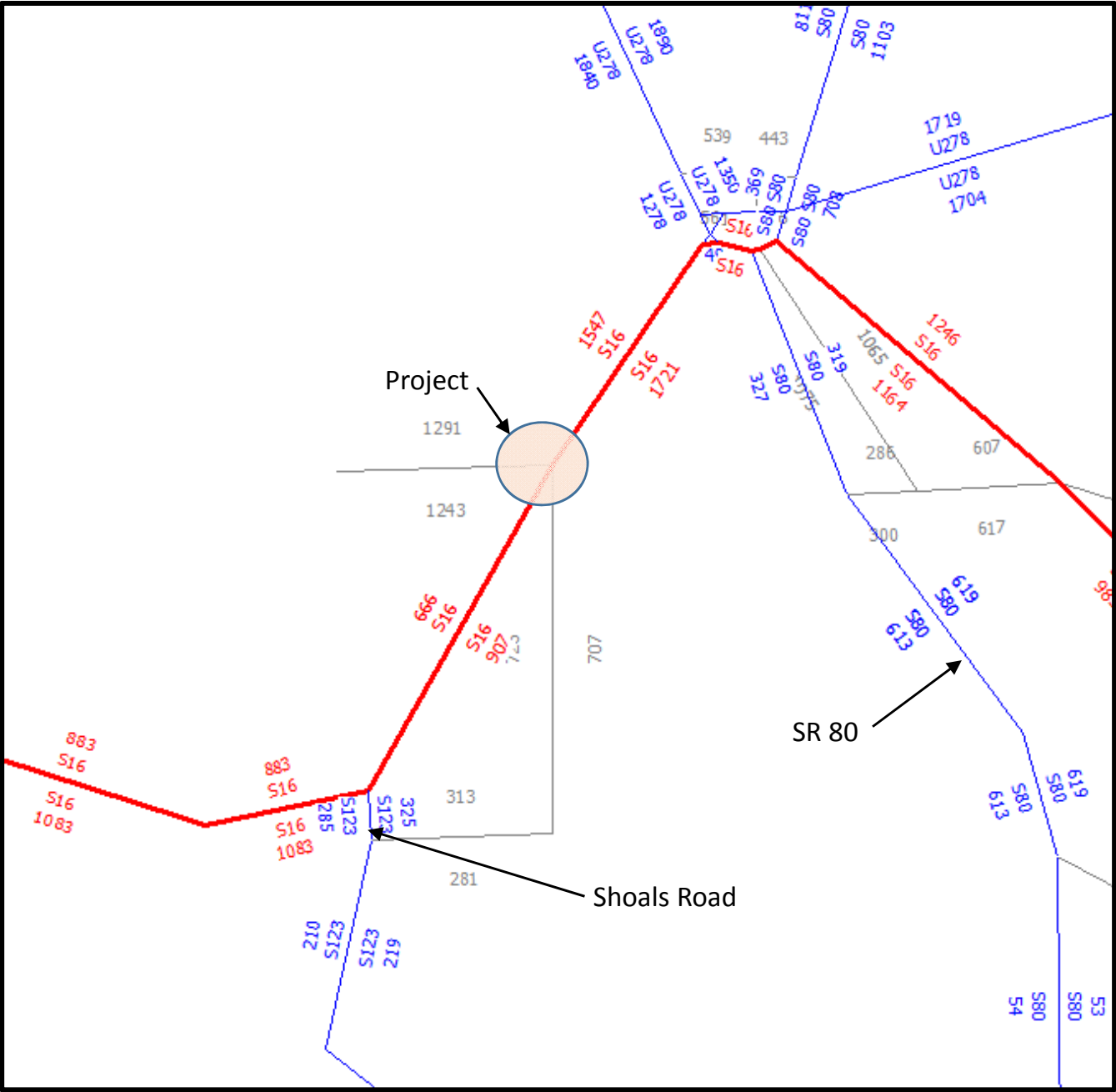
PI No. 0007057, Warren County
SR 16 / Macon Highway @ Short Creek
Georgia Statewide Model Plots



GA Statewide Model 2010 Base Year

South of Project

2010 Model Volumes		2040 Model Volumes		Growth Rate
1-Way	2-Way	1-Way	2-Way	0.71%
599	1,273	666	1,573	
674		907		



GA Statewide Model 2040 EC

North of Project

2010 Model Volumes		2040 Model Volumes		Growth Rate
1-Way	2-Way	1-Way	2-Way	
1,141	2,313	1,547	3,268	
1,172		1,721		

Appendix B

Traffic Count Data



All Traffic Data Services, Inc

1336 Farmer Road
Covington, Ga 30012
ph 404-374-1283

Page 1

Site Code: 1
Station ID: 1
SR 16 - MACON HWY SOUTH OF
SHORT CREEK BRIDGE
Latitude: 0' 0.0000 Undefined

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
04/11/18	0	0	1	0	0	0	0	0	0	0	0	0	0	1
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	1	2	0	0	0	0	0	0	0	0	0	0	3
00:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	2	3	0	0	0	0	0	0	0	0	0	0	5
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	1	0	0	0	0	1
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	1	0	0	0	0	1
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	1	0	0	1	0	0	0	0	0	0	0	0	2
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	0	0	2	0	0	0	0	0	0	0	0	3
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:00	0	2	0	0	1	0	0	0	0	0	0	0	0	3
04:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
04:30	1	3	0	0	0	1	0	0	1	0	0	0	0	6
04:45	0	3	1	0	1	0	0	0	1	0	0	0	0	6
	1	12	1	0	2	1	0	0	2	0	0	0	0	19
05:00	0	5	0	1	0	0	0	0	1	1	0	0	0	8
05:15	0	4	1	1	0	0	0	0	0	0	0	0	0	6
05:30	0	5	4	0	0	0	0	0	0	0	0	0	0	9
05:45	3	3	2	0	1	1	0	0	1	0	0	0	0	11
	3	17	7	2	1	1	0	0	2	1	0	0	0	34
06:00	0	2	3	0	3	0	0	0	1	0	0	0	0	9
06:15	0	5	3	0	1	0	0	0	0	0	0	0	0	9
06:30	0	6	3	1	3	0	0	0	0	0	0	0	0	13
06:45	0	7	2	0	3	0	0	1	1	0	0	0	0	14
	0	20	11	1	10	0	0	1	2	0	0	0	0	45
07:00	1	4	8	1	2	0	0	0	0	0	0	0	0	16
07:15	0	17	2	0	0	0	0	1	0	0	0	0	0	20
07:30	1	6	2	0	2	1	0	1	0	0	0	0	0	13
07:45	0	6	3	0	3	0	0	0	1	0	0	0	0	13
	2	33	15	1	7	1	0	2	1	0	0	0	0	62
08:00	1	6	1	1	0	1	0	0	1	0	0	0	0	11
08:15	0	6	0	0	2	0	0	0	0	0	0	0	0	8
08:30	1	6	3	0	1	0	0	0	0	0	0	0	0	11
08:45	0	9	1	0	0	0	0	0	1	0	0	0	0	11
	2	27	5	1	3	1	0	0	2	0	0	0	0	41
09:00	0	10	3	0	0	1	0	0	0	0	0	0	0	14
09:15	0	12	5	0	2	0	0	1	0	0	0	0	0	20
09:30	0	12	3	0	1	0	0	1	1	0	0	0	0	18
09:45	0	8	3	0	0	0	0	0	1	0	0	0	0	12
	0	42	14	0	3	1	0	2	2	0	0	0	0	64
10:00	0	16	1	0	4	0	0	2	1	0	0	0	0	24
10:15	0	6	5	0	1	0	0	1	0	0	0	0	0	13
10:30	0	6	2	0	0	0	0	0	0	0	0	0	0	8
10:45	0	11	5	1	2	0	0	1	1	0	0	0	0	21
	0	39	13	1	7	0	0	4	2	0	0	0	0	66
11:00	0	9	2	1	0	0	0	1	0	0	0	0	0	13
11:15	0	8	3	1	2	0	0	1	0	0	0	0	0	15
11:30	1	9	3	0	1	2	0	1	0	0	0	0	0	17
11:45	0	9	2	0	2	0	0	0	0	0	0	0	0	13
	1	35	10	2	5	2	0	3	0	0	0	0	0	58
Total	9	228	80	8	40	7	0	12	14	1	0	0	0	399
Percent	2.3%	57.1%	20.1%	2.0%	10.0%	1.8%	0.0%	3.0%	3.5%	0.3%	0.0%	0.0%	0.0%	

All Traffic Data Services, Inc

1336 Farmer Road
Covington, Ga 30012
ph 404-374-1283

Page 2

Site Code: 1

Station ID: 1

SR 16 - MACON HWY SOUTH OF
SHORT CREEK BRIDGE

Latitude: 0' 0.0000 Undefined

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	0	6	2	0	2	0	0	0	0	0	0	0	0	10
12:15	0	11	1	0	2	0	0	1	1	0	0	0	0	16
12:30	0	10	1	1	2	0	0	0	1	0	0	0	0	15
12:45	0	10	1	0	0	0	0	0	0	0	0	0	0	11
	0	37	5	1	6	0	0	1	2	0	0	0	0	52
13:00	0	7	1	1	2	0	0	1	1	0	0	0	0	13
13:15	4	16	2	0	2	0	0	1	0	0	0	0	0	25
13:30	0	5	1	0	0	0	0	1	0	0	0	0	0	7
13:45	1	11	2	1	2	0	0	0	1	0	0	0	0	18
	5	39	6	2	6	0	0	3	2	0	0	0	0	63
14:00	0	10	4	0	0	0	0	0	0	0	0	0	0	14
14:15	0	4	2	0	0	0	0	1	0	0	0	0	0	7
14:30	0	9	5	0	5	0	0	0	0	0	0	0	0	19
14:45	0	13	4	0	1	0	0	2	0	0	0	0	0	20
	0	36	15	0	6	0	0	3	0	0	0	0	0	60
15:00	0	6	2	0	0	1	0	2	2	0	0	0	0	13
15:15	0	6	4	0	1	2	0	0	0	0	0	0	0	13
15:30	0	6	2	0	1	0	0	0	1	0	0	0	0	10
15:45	0	8	5	0	0	0	0	1	2	0	0	0	0	16
	0	26	13	0	2	3	0	3	5	0	0	0	0	52
16:00	0	9	3	0	3	2	0	0	0	0	0	0	0	17
16:15	0	8	2	0	1	1	0	1	0	0	0	0	0	13
16:30	0	7	3	1	1	0	0	1	0	0	0	0	0	13
16:45	0	12	7	0	3	0	0	0	1	0	0	0	0	23
	0	36	15	1	8	3	0	2	1	0	0	0	0	66
17:00	0	18	0	0	0	0	0	2	1	0	0	0	0	21
17:15	0	7	1	0	1	0	0	0	0	0	0	0	0	9
17:30	0	6	2	0	3	1	0	3	0	0	0	0	0	15
17:45	0	10	3	0	3	1	0	1	0	0	0	0	0	18
	0	41	6	0	7	2	0	6	1	0	0	0	0	63
18:00	0	10	2	0	1	0	0	0	0	0	0	0	0	13
18:15	0	13	1	0	3	0	0	1	0	0	0	0	0	18
18:30	0	6	3	0	1	0	0	0	0	0	0	0	0	10
18:45	0	10	0	0	1	0	0	0	0	0	0	0	0	11
	0	39	6	0	6	0	0	1	0	0	0	0	0	52
19:00	0	9	3	0	1	0	0	0	0	0	0	0	0	13
19:15	0	8	1	0	0	0	0	1	0	0	0	0	0	10
19:30	0	4	0	0	1	0	0	0	0	0	0	0	0	5
19:45	0	5	1	0	1	0	0	1	0	0	0	0	0	8
	0	26	5	0	3	0	0	2	0	0	0	0	0	36
20:00	0	7	3	0	1	0	0	1	0	0	0	0	0	12
20:15	0	4	0	0	1	0	0	0	0	0	0	0	0	5
20:30	0	8	1	0	0	0	0	0	0	0	0	0	0	9
20:45	0	3	2	0	1	0	0	1	1	0	0	0	0	8
	0	22	6	0	3	0	0	2	1	0	0	0	0	34
21:00	1	3	1	0	0	1	0	0	0	0	0	0	0	6
21:15	0	2	1	0	0	0	0	0	0	0	0	0	0	3
21:30	0	5	0	0	0	0	0	0	2	0	0	0	0	7
21:45	0	1	1	0	0	0	0	0	0	0	0	0	0	2
	1	11	3	0	0	1	0	0	2	0	0	0	0	18
22:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6
22:15	0	6	4	0	0	0	0	0	0	0	0	0	0	10
22:30	0	0	0	0	0	0	0	0	1	0	0	0	0	1
22:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4
	0	15	5	0	0	0	0	0	1	0	0	0	0	21
23:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
23:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2
23:30	0	2	1	0	0	0	0	1	0	0	0	0	0	4
23:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
	0	7	2	0	0	0	0	1	0	0	0	0	0	10
Total	6	335	87	4	47	9	0	24	15	0	0	0	0	527
Percent	1.1%	63.6%	16.5%	0.8%	8.9%	1.7%	0.0%	4.6%	2.8%	0.0%	0.0%	0.0%	0.0%	

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1336 Farmer Road
Covington, Ga 30012
ph 404-374-1283

Site Code: 1
Station ID: 1
SR 16 - MACON HWY SOUTH OF
SHORT CREEK BRIDGE
Latitude: 0' 0.0000 Undefined

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
04/12/18	0	2	0	0	0	0	0	0	0	0	0	0	0	2
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	3	0	0	0	0	0	0	0	0	0	0	0	3
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	1	0	0	0	0	0	1
01:30	0	0	1	0	0	0	0	0	1	0	0	0	0	2
01:45	1	0	0	0	0	1	0	0	0	0	0	0	0	2
	1	0	1	0	0	1	0	1	1	0	0	0	0	5
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	1	1	0	0	0	0	2
03:45	0	1	1	0	0	0	0	0	0	0	0	0	0	2
	0	1	1	0	0	0	0	1	1	0	0	0	0	4
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
04:15	0	5	0	0	1	0	0	0	0	0	0	0	0	6
04:30	0	3	2	0	0	0	0	0	0	0	0	0	0	5
04:45	0	4	1	0	0	0	0	1	0	0	0	0	0	6
	0	12	3	0	2	0	0	1	0	0	0	0	0	18
05:00	0	5	1	1	1	0	0	2	1	0	0	0	0	11
05:15	0	5	0	0	0	0	0	0	0	0	0	0	0	5
05:30	0	6	2	0	1	0	0	1	0	0	0	0	0	10
05:45	1	5	1	0	0	1	0	0	0	0	0	0	0	8
	1	21	4	1	2	1	0	3	1	0	0	0	0	34
06:00	0	8	2	0	1	0	0	0	0	0	0	0	0	11
06:15	0	9	2	0	2	0	0	0	0	0	0	0	0	13
06:30	0	11	2	1	1	0	0	2	1	0	0	0	0	18
06:45	1	12	0	0	2	0	0	0	0	0	0	0	0	15
	1	40	6	1	6	0	0	2	1	0	0	0	0	57
07:00	0	10	3	0	2	0	0	0	0	0	0	0	0	15
07:15	1	11	3	1	4	0	0	0	0	0	0	0	0	20
07:30	0	4	5	0	2	0	0	0	1	0	0	0	0	12
07:45	0	15	4	0	5	0	0	3	1	0	0	0	0	28
	1	40	15	1	13	0	0	3	2	0	0	0	0	75
08:00	0	4	5	0	1	0	0	0	0	0	0	0	0	10
08:15	0	5	3	0	2	0	0	0	0	0	0	0	0	10
08:30	1	8	3	0	2	1	0	1	0	0	0	0	0	16
08:45	1	11	2	0	3	1	0	0	2	0	0	0	0	20
	2	28	13	0	8	2	0	1	2	0	0	0	0	56
09:00	0	8	2	1	0	0	0	2	1	0	0	0	0	14
09:15	0	6	2	1	1	0	0	1	0	0	0	0	0	11
09:30	0	6	5	0	3	0	0	0	0	0	0	0	0	14
09:45	0	8	1	0	2	0	0	2	2	0	0	0	0	15
	0	28	10	2	6	0	0	5	3	0	0	0	0	54
10:00	0	6	2	0	1	0	0	1	0	0	0	0	0	10
10:15	1	8	6	1	3	0	0	4	0	0	0	0	0	23
10:30	1	3	1	0	1	1	0	1	0	0	0	0	0	8
10:45	0	5	4	0	3	0	0	0	1	0	0	0	0	13
	2	22	13	1	8	1	0	6	1	0	0	0	0	54
11:00	0	8	1	0	1	0	0	1	0	0	0	0	0	11
11:15	0	10	3	0	3	0	0	1	0	0	0	0	0	17
11:30	0	6	5	0	3	1	0	1	0	0	0	0	0	16
11:45	0	7	2	0	1	0	0	0	0	0	0	0	0	10
	0	31	11	0	8	1	0	3	0	0	0	0	0	54
Total	8	227	77	6	53	6	0	26	12	0	0	0	0	415
Percent	1.9%	54.7%	18.6%	1.4%	12.8%	1.4%	0.0%	6.3%	2.9%	0.0%	0.0%	0.0%	0.0%	

All Traffic Data Services, Inc

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Site Code: 1
Station ID: 1
SR 16 - MACON HWY SOUTH OF
SHORT CREEK BRIDGE
Latitude: 0' 0.0000 Undefined

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	1	9	4	0	0	1	0	0	0	0	0	0	0	15
12:15	0	12	2	1	4	0	0	0	0	0	0	0	0	19
12:30	0	13	2	0	4	1	0	0	0	0	0	0	0	20
12:45	0	6	4	1	3	0	0	1	2	0	0	0	0	17
13:00	1	40	12	2	11	2	0	1	2	0	0	0	0	71
13:15	1	9	2	0	2	0	0	3	0	0	0	0	0	17
13:30	0	17	3	0	0	0	0	1	0	0	0	0	0	21
13:45	0	9	3	3	3	0	0	1	0	0	0	0	0	19
14:00	1	6	0	0	1	0	0	2	0	0	0	0	0	10
14:15	2	41	8	3	6	0	0	7	0	0	0	0	0	67
14:30	0	9	4	0	2	0	0	0	2	0	0	0	0	17
14:45	0	4	1	1	1	0	0	0	0	0	0	0	0	7
15:00	1	15	2	1	1	0	0	0	3	0	0	0	0	23
15:15	2	8	4	0	1	0	0	1	1	0	0	0	0	17
15:30	3	36	11	2	5	0	0	1	6	0	0	0	0	64
15:45	0	7	6	0	0	0	0	3	0	0	0	0	0	16
16:00	0	7	3	0	0	0	0	2	0	0	0	0	0	12
16:15	0	2	4	0	1	1	0	0	1	0	0	0	0	9
16:30	0	4	2	0	0	0	0	0	1	0	0	0	0	7
16:45	0	20	15	0	1	1	0	5	2	0	0	0	0	44
17:00	0	10	3	0	1	0	0	0	0	0	0	0	0	14
17:15	0	9	0	0	1	1	0	0	0	0	0	0	0	11
17:30	0	14	4	1	0	1	0	1	3	0	0	0	0	24
17:45	0	10	4	1	2	0	0	0	0	0	0	0	0	17
18:00	0	43	11	2	4	2	0	1	3	0	0	0	0	66
18:15	1	8	3	0	2	0	0	0	0	0	0	0	0	14
18:30	1	13	3	0	1	0	0	1	0	0	0	0	0	19
18:45	0	12	5	0	3	2	0	0	0	0	0	0	0	22
19:00	0	13	1	0	4	0	0	0	0	0	0	0	0	18
19:15	2	46	12	0	10	2	0	1	0	0	0	0	0	73
19:30	0	12	4	0	3	0	0	4	0	0	0	0	0	23
19:45	0	12	3	0	2	0	0	1	2	0	0	0	0	20
20:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
20:15	0	7	1	0	1	0	0	0	0	0	0	0	0	9
20:30	0	36	8	0	6	0	0	5	2	0	0	0	0	57
20:45	0	11	2	0	2	0	0	0	0	0	0	0	0	15
21:00	0	11	0	1	1	0	0	0	0	0	0	0	0	13
21:15	0	10	5	0	0	0	0	0	1	0	0	0	0	16
21:30	0	5	2	0	0	0	0	0	0	0	0	0	0	7
21:45	0	37	9	1	3	0	0	0	1	0	0	0	0	51
22:00	0	5	1	0	1	0	0	1	0	0	0	0	0	8
22:15	1	4	0	0	0	1	0	1	1	0	0	0	0	8
22:30	0	1	2	1	2	0	0	0	0	0	0	0	0	6
22:45	0	0	2	0	0	0	0	1	1	0	0	0	0	4
23:00	1	10	5	1	3	1	0	3	2	0	0	0	0	26
23:15	0	4	0	0	0	0	0	0	1	0	0	0	0	6
23:30	0	5	1	0	0	1	0	0	0	0	0	0	0	7
23:45	0	6	1	1	1	0	0	0	0	0	0	0	0	9
24:00	0	5	1	0	1	0	0	0	0	0	0	0	0	7
24:15	0	20	3	2	2	1	0	0	1	0	0	0	0	29
24:30	0	8	2	0	1	0	0	0	0	0	0	0	0	11
24:45	0	4	1	0	0	0	0	0	1	0	0	0	0	6
25:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5
25:15	0	1	0	0	0	0	0	0	1	0	0	0	0	2
25:30	0	17	4	0	1	0	0	0	2	0	0	0	0	24
25:45	0	3	1	0	0	0	0	0	0	0	0	0	0	4
26:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
26:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
26:30	0	0	1	0	0	0	0	0	0	0	0	0	0	1
26:45	0	0	1	0	0	0	0	0	0	0	0	0	0	1
27:00	0	5	3	0	0	0	0	0	0	0	0	0	0	8
Total	9	351	101	13	52	9	0	24	21	0	0	0	0	580
Percent	1.6%	60.5%	17.4%	2.2%	9.0%	1.6%	0.0%	4.1%	3.6%	0.0%	0.0%	0.0%	0.0%	
Grand Total	32	1141	345	31	192	31	0	86	62	1	0	0	0	1921
Percent	1.7%	59.4%	18.0%	1.6%	10.0%	1.6%	0.0%	4.5%	3.2%	0.1%	0.0%	0.0%	0.0%	

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Site Code: 1
Station ID: 1
SR 16 - MACON HWY SOUTH OF
SHORT CREEK BRIDGE
Latitude: 0' 0.0000 Undefined

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
04/11/18	0	0	1	0	1	0	0	0	0	0	0	0	0	2
00:15	0	0	3	0	0	0	0	0	0	0	0	0	0	3
00:30	0	0	1	0	0	0	0	0	0	0	0	0	0	1
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	5	0	1	0	0	0	0	0	0	0	0	6
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:15	0	0	2	0	0	0	0	0	0	0	0	0	0	2
01:30	0	0	1	0	1	0	0	0	0	0	0	0	0	2
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	3	0	1	0	0	0	0	0	0	0	0	5
02:00	0	0	0	0	0	0	0	0	1	0	0	0	0	1
02:15	0	0	3	0	0	0	0	0	0	0	0	0	0	3
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	3	0	0	0	0	0	1	0	0	0	0	4
03:00	0	1	4	0	0	0	0	0	0	0	0	0	0	5
03:15	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	2	5	0	0	0	0	0	0	0	0	0	0	7
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	1	2	0	0	0	0	0	0	0	0	0	0	3
04:30	0	1	0	1	0	0	0	0	0	0	0	0	0	2
04:45	0	3	0	0	1	0	0	0	0	0	0	0	0	4
	0	5	2	1	1	0	0	0	0	0	0	0	0	9
05:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
05:15	1	3	2	0	0	1	0	0	0	0	0	0	0	7
05:30	0	3	0	0	1	1	0	0	1	0	0	0	0	6
05:45	1	3	1	2	3	1	0	0	0	0	0	0	0	11
	2	12	3	2	4	3	0	0	1	0	0	0	0	27
06:00	0	0	3	0	1	0	0	1	0	0	0	0	0	5
06:15	0	3	1	1	1	0	0	1	0	0	0	0	0	7
06:30	0	3	2	0	1	0	0	1	0	0	0	0	0	7
06:45	0	2	4	1	3	0	0	0	1	0	0	0	0	11
	0	8	10	2	6	0	0	3	1	0	0	0	0	30
07:00	0	4	4	0	2	0	0	0	1	0	0	0	0	11
07:15	0	2	4	0	2	0	0	0	0	0	0	0	0	8
07:30	0	6	8	0	0	0	0	0	0	0	0	0	0	14
07:45	0	7	8	0	3	0	0	0	0	0	0	0	0	18
	0	19	24	0	7	0	0	0	1	0	0	0	0	51
08:00	0	2	6	0	0	1	0	0	1	0	0	0	0	10
08:15	0	4	4	0	1	0	0	1	1	0	0	0	0	11
08:30	0	5	5	1	2	1	0	0	0	0	0	0	0	14
08:45	0	4	5	0	2	0	0	2	0	0	0	0	0	13
	0	15	20	1	5	2	0	3	2	0	0	0	0	48
09:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
09:15	0	2	3	1	2	0	0	0	0	0	0	0	0	8
09:30	2	3	6	0	4	2	0	0	1	0	0	0	0	18
09:45	0	4	7	0	3	0	0	2	0	0	0	0	0	16
	2	12	17	1	9	2	0	2	1	0	0	0	0	46
10:00	0	5	1	0	1	0	0	0	1	0	0	0	0	8
10:15	0	9	7	0	2	1	0	1	0	1	0	0	0	21
10:30	0	4	2	0	3	1	0	0	0	0	0	0	0	10
10:45	0	5	2	0	0	0	0	3	0	0	0	0	0	10
	0	23	12	0	6	2	0	4	1	1	0	0	0	49
11:00	0	3	4	0	2	0	0	0	0	0	0	0	0	9
11:15	0	7	2	0	2	0	0	0	0	0	0	0	0	11
11:30	0	5	1	0	3	0	0	0	2	0	0	0	0	11
11:45	0	5	3	1	2	0	0	2	1	0	0	0	0	14
	0	20	10	1	9	0	0	2	3	0	0	0	0	45
Total	4	117	114	8	49	9	0	14	11	1	0	0	0	327
Percent	1.2%	35.8%	34.9%	2.4%	15.0%	2.8%	0.0%	4.3%	3.4%	0.3%	0.0%	0.0%	0.0%	

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Site Code: 1
Station ID: 1
SR 16 - MACON HWY SOUTH OF
SHORT CREEK BRIDGE
Latitude: 0' 0.0000 Undefined

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	1	9	5	1	4	0	0	2	0	0	0	0	0	22
12:15	0	11	1	0	4	0	0	2	0	0	0	0	0	18
12:30	0	7	1	0	2	0	0	1	0	0	0	0	0	11
12:45	0	6	2	0	3	0	0	2	0	0	0	0	0	13
13:00	1	33	9	1	13	0	0	7	0	0	0	0	0	64
13:15	0	5	4	0	1	1	0	0	0	0	0	0	0	11
13:30	0	4	2	0	0	0	0	0	0	0	0	0	0	6
13:45	0	8	2	0	2	0	0	0	0	0	0	0	0	12
14:00	1	9	3	0	2	1	0	0	0	0	0	0	0	16
14:15	1	26	11	0	5	2	0	0	0	0	0	0	0	45
14:30	0	4	5	1	2	0	0	1	1	0	0	0	0	14
14:45	0	6	3	0	3	1	0	0	0	0	0	0	0	13
15:00	0	8	1	0	0	1	0	2	0	0	0	0	0	12
15:15	0	6	1	0	1	0	0	0	1	0	0	0	0	9
15:30	0	24	10	1	6	2	0	3	2	0	0	0	0	48
15:45	0	9	2	0	4	0	0	0	0	0	0	0	0	15
16:00	0	9	5	1	1	1	0	0	0	0	0	0	0	17
16:15	0	9	5	0	2	0	0	1	0	0	0	0	0	17
16:30	1	9	3	0	2	2	0	0	0	0	0	0	0	17
16:45	1	36	15	1	9	3	0	1	0	0	0	0	0	66
17:00	0	11	3	0	5	0	0	1	0	0	0	0	0	20
17:15	0	8	1	0	3	0	0	1	0	0	0	0	0	13
17:30	0	10	4	0	0	0	0	0	0	0	0	0	0	14
17:45	0	8	4	0	3	0	0	0	0	0	0	0	0	15
18:00	0	37	12	0	11	0	0	2	0	0	0	0	0	62
18:15	0	13	4	0	3	0	0	0	0	0	0	0	0	20
18:30	1	9	6	1	2	1	0	1	0	0	0	0	0	21
18:45	0	9	3	1	3	0	0	2	0	0	0	0	0	18
19:00	0	5	4	0	1	0	0	1	0	0	0	0	0	11
19:15	1	36	17	2	9	1	0	4	0	0	0	0	0	70
19:30	0	8	6	1	4	0	0	0	0	0	0	0	0	19
19:45	0	13	6	0	1	0	0	1	0	0	0	0	0	21
20:00	0	8	1	0	2	0	0	0	0	0	0	0	0	11
20:15	0	4	5	0	4	0	0	0	0	0	0	0	0	13
20:30	0	33	18	1	11	0	0	1	0	0	0	0	0	64
20:45	0	3	1	0	0	0	0	1	0	0	0	0	0	5
21:00	0	4	5	0	0	0	0	0	0	0	0	0	0	9
21:15	0	4	4	0	2	0	0	0	0	0	0	0	0	10
21:30	0	2	3	0	4	0	0	0	0	0	0	0	0	9
21:45	0	13	13	0	6	0	0	1	0	0	0	0	0	33
22:00	0	4	3	0	1	1	0	0	1	0	0	0	0	10
22:15	0	2	6	0	2	0	0	0	0	0	0	0	0	10
22:30	0	3	5	0	0	0	0	0	0	0	0	0	0	8
22:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4
23:00	0	13	14	0	3	1	0	0	1	0	0	0	0	32
23:15	0	2	2	0	0	0	0	0	0	0	0	0	0	4
23:30	0	0	2	0	0	0	0	0	0	0	0	0	0	2
23:45	0	0	2	1	0	0	0	0	0	0	0	0	0	3
24:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
24:15	0	4	7	1	0	0	0	0	0	0	0	0	0	12
24:30	0	3	2	0	0	0	0	0	0	0	0	0	0	5
24:45	0	2	0	0	0	0	0	0	1	0	0	0	0	3
25:00	0	1	2	0	0	0	0	0	0	0	0	0	0	3
25:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25:30	0	6	4	0	0	0	0	0	1	0	0	0	0	11
25:45	0	2	3	1	0	0	0	0	0	0	0	0	0	6
26:00	0	3	2	0	1	0	0	0	0	0	0	0	0	6
26:15	1	0	0	0	0	2	0	0	0	0	0	0	0	3
26:30	0	0	1	0	0	0	0	0	0	0	0	0	0	1
26:45	1	5	6	1	1	2	0	0	0	0	0	0	0	16
Total	5	266	136	8	74	11	0	19	4	0	0	0	0	523
Percent	1.0%	50.9%	26.0%	1.5%	14.1%	2.1%	0.0%	3.6%	0.8%	0.0%	0.0%	0.0%	0.0%	

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Site Code: 1
Station ID: 1
SR 16 - MACON HWY SOUTH OF
SHORT CREEK BRIDGE
Latitude: 0' 0.0000 Undefined

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
04/12/18	0	0	3	0	1	0	0	0	0	0	0	0	0	4
00:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
00:30	0	1	1	0	0	0	0	0	0	0	0	0	0	2
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	2	4	0	1	0	0	0	0	0	0	0	0	7
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	1	0	0	0	0	0	0	0	0	0	0	1
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:15	0	1	1	0	0	0	0	0	0	0	0	0	0	2
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:15	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:30	0	0	3	0	1	0	0	0	0	0	0	0	0	4
03:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:15	0	2	4	0	1	0	0	0	0	0	0	0	0	7
04:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	1	2	0	0	1	1	0	0	0	0	0	0	0	5
05:15	1	6	0	0	1	1	0	0	0	0	0	0	0	9
05:30	0	2	1	0	1	0	0	0	0	0	0	0	0	4
05:45	0	0	1	0	0	0	0	0	1	0	0	0	0	2
06:00	0	1	0	0	0	0	0	1	0	0	0	0	0	2
06:15	0	6	5	0	2	0	0	0	0	0	0	0	0	13
06:30	0	9	7	0	3	0	0	1	1	0	0	0	0	21
06:45	0	1	4	0	1	0	0	0	1	0	0	0	0	7
07:00	1	4	2	1	3	1	0	0	0	0	0	0	0	12
07:15	0	1	3	0	1	0	0	2	0	0	0	0	0	7
07:30	2	1	1	0	2	1	0	1	0	0	0	0	0	8
07:45	3	7	10	1	7	2	0	3	1	0	0	0	0	34
08:00	0	2	3	0	3	1	0	0	0	0	0	0	0	9
08:15	1	6	6	1	1	1	0	0	0	0	0	0	0	16
08:30	1	1	8	0	3	1	0	0	0	0	0	0	0	14
08:45	1	0	7	0	4	1	0	0	1	0	0	0	0	14
09:00	3	9	24	1	11	4	0	0	1	0	0	0	0	53
09:15	1	3	6	0	1	1	0	0	1	0	0	0	0	13
09:30	0	2	5	0	5	0	0	1	0	0	0	0	0	13
09:45	1	5	4	0	3	0	0	0	0	1	0	0	0	14
10:00	0	6	3	0	4	0	0	1	1	0	0	0	0	15
10:15	2	16	18	0	13	1	0	2	2	1	0	0	0	55
10:30	1	4	3	0	1	2	0	1	0	0	0	0	0	12
10:45	1	3	1	2	3	1	0	2	0	0	0	0	0	13
11:00	2	5	1	1	2	2	0	0	0	0	0	0	0	13
11:15	0	4	2	1	2	1	0	0	1	0	0	0	0	11
11:30	4	16	7	4	8	6	0	3	1	0	0	0	0	49
11:45	1	3	3	0	3	2	0	1	0	0	0	0	0	13
12:00	2	4	5	1	4	2	0	0	0	0	0	0	0	18
12:15	1	8	6	1	5	1	0	1	0	0	0	0	0	23
12:30	1	3	0	0	0	1	0	0	0	0	0	0	0	5
12:45	5	18	14	2	12	6	0	2	0	0	0	0	0	59
13:00	1	5	7	2	2	2	0	0	1	0	0	0	0	20
13:15	1	5	5	1	5	1	0	0	0	0	0	0	0	18
13:30	1	3	1	2	2	1	0	0	0	0	0	0	0	10
13:45	1	6	4	0	3	1	0	1	0	0	0	0	0	16
14:00	4	19	17	5	12	5	0	1	1	0	0	0	0	64
Total	22	105	108	13	69	25	0	12	7	1	0	0	0	362
Percent	6.1%	29.0%	29.8%	3.6%	19.1%	6.9%	0.0%	3.3%	1.9%	0.3%	0.0%	0.0%	0.0%	

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Site Code: 1
Station ID: 1
SR 16 - MACON HWY SOUTH OF
SHORT CREEK BRIDGE
Latitude: 0' 0.0000 Undefined

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	0	4	3	0	0	1	0	0	1	0	0	0	0	9
12:15	0	7	5	1	3	0	0	3	1	0	0	0	0	20
12:30	1	2	4	1	2	1	0	0	0	0	0	0	0	11
12:45	0	4	4	0	3	0	0	0	2	0	0	0	0	13
13:00	1	17	16	2	8	2	0	3	4	0	0	0	0	53
13:15	0	6	2	0	0	1	0	1	0	0	0	0	0	10
13:30	0	4	3	0	4	0	0	1	0	0	0	0	0	12
13:45	0	3	4	0	2	0	0	0	1	0	0	0	0	10
14:00	0	6	3	1	3	1	0	0	0	0	0	0	0	14
14:15	0	19	12	1	9	2	0	2	1	0	0	0	0	46
14:30	0	7	2	0	1	0	0	1	0	0	0	0	0	11
14:45	1	6	2	0	4	0	0	0	0	0	0	0	0	13
15:00	0	5	6	0	1	0	0	1	0	0	0	0	0	13
15:15	0	6	2	1	2	0	0	0	0	0	0	0	0	11
15:30	1	24	12	1	8	0	0	2	0	0	0	0	0	48
15:45	0	5	4	1	0	0	0	0	1	0	0	0	0	11
16:00	1	9	2	0	1	1	0	0	0	0	0	0	0	14
16:15	0	13	4	1	2	0	0	0	0	0	0	0	0	20
16:30	0	8	4	0	4	0	0	0	0	0	0	0	0	16
16:45	1	35	14	2	7	1	0	0	1	0	0	0	0	61
17:00	0	13	12	0	5	0	0	4	0	0	0	0	0	34
17:15	0	16	4	1	4	0	0	2	0	0	0	0	0	27
17:30	0	10	5	0	2	0	0	2	0	0	0	0	0	19
17:45	0	9	4	0	3	0	0	3	0	0	0	0	0	19
18:00	0	48	25	1	14	0	0	11	0	0	0	0	0	99
18:15	0	10	1	0	0	0	0	0	1	0	0	0	0	12
18:30	0	9	4	0	2	0	0	0	0	0	0	0	0	15
18:45	1	11	7	0	4	0	0	1	0	0	0	0	0	24
19:00	0	13	6	0	2	0	0	1	0	0	0	0	0	22
19:15	1	43	18	0	8	0	0	2	1	0	0	0	0	73
19:30	0	9	3	0	2	0	0	0	0	0	0	0	0	14
19:45	0	10	4	0	1	0	0	1	0	0	0	0	0	16
20:00	0	5	2	0	0	0	0	0	0	0	0	0	0	7
20:15	0	5	0	0	2	0	0	0	0	0	0	0	0	7
20:30	0	29	9	0	5	0	0	1	0	0	0	0	0	44
20:45	0	10	2	0	2	0	0	0	0	0	0	0	0	14
21:00	0	5	6	0	3	0	0	0	0	0	0	0	0	14
21:15	0	6	2	0	0	0	0	0	0	0	0	0	0	8
21:30	0	5	2	0	0	0	0	0	0	0	0	0	0	7
21:45	0	26	12	0	5	0	0	0	0	0	0	0	0	43
22:00	0	9	0	0	1	0	0	0	0	0	0	0	0	10
22:15	0	5	5	0	1	0	0	0	0	0	0	0	0	11
22:30	0	5	2	0	1	0	0	0	0	0	0	0	0	8
22:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4
23:00	0	23	7	0	3	0	0	0	0	0	0	0	0	33
23:15	0	3	0	0	2	0	0	0	0	0	0	0	0	5
23:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
23:45	1	0	2	0	0	1	0	0	0	0	0	0	0	4
Total	2	4	2	1	1	0	0	0	0	0	0	0	0	8
Percent	7	282	139	10	74	7	0	22	7	0	0	0	0	548
Grand Total	38	770	497	39	266	52	0	67	29	2	0	0	0	1760
Percent	2.2%	43.8%	28.2%	2.2%	15.1%	3.0%	0.0%	3.8%	1.6%	0.1%	0.0%	0.0%	0.0%	

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Site Code: 1
Station ID: 1
SR 16 - MACON HWY SOUTH OF
SHORT CREEK BRIDGE
Latitude: 0' 0.0000 Undefined

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
04/11/18	0	0	1	0	0	0	0	0	0	0	0	0	0	1
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	1	2	0	0	0	0	0	0	0	0	0	0	3
00:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	2	3	0	0	0	0	0	0	0	0	0	0	5
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	1	0	0	0	0	1
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	1	0	0	0	0	1
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	1	0	0	1	0	0	0	0	0	0	0	0	2
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	0	0	2	0	0	0	0	0	0	0	0	3
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:00	0	2	0	0	1	0	0	0	0	0	0	0	0	3
04:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
04:30	1	3	0	0	0	1	0	0	1	0	0	0	0	6
04:45	0	3	1	0	1	0	0	0	1	0	0	0	0	6
	1	12	1	0	2	1	0	0	2	0	0	0	0	19
05:00	0	5	0	1	0	0	0	0	1	1	0	0	0	8
05:15	0	4	1	1	0	0	0	0	0	0	0	0	0	6
05:30	0	5	4	0	0	0	0	0	0	0	0	0	0	9
05:45	3	3	2	0	1	1	0	0	1	0	0	0	0	11
	3	17	7	2	1	1	0	0	2	1	0	0	0	34
06:00	0	2	3	0	3	0	0	0	1	0	0	0	0	9
06:15	0	5	3	0	1	0	0	0	0	0	0	0	0	9
06:30	0	6	3	1	3	0	0	0	0	0	0	0	0	13
06:45	0	7	2	0	3	0	0	1	1	0	0	0	0	14
	0	20	11	1	10	0	0	1	2	0	0	0	0	45
07:00	1	4	8	1	2	0	0	0	0	0	0	0	0	16
07:15	0	17	2	0	0	0	0	1	0	0	0	0	0	20
07:30	1	6	2	0	2	1	0	1	0	0	0	0	0	13
07:45	0	6	3	0	3	0	0	0	1	0	0	0	0	13
	2	33	15	1	7	1	0	2	1	0	0	0	0	62
08:00	1	6	1	1	0	1	0	0	1	0	0	0	0	11
08:15	0	6	0	0	2	0	0	0	0	0	0	0	0	8
08:30	1	6	3	0	1	0	0	0	0	0	0	0	0	11
08:45	0	9	1	0	0	0	0	0	1	0	0	0	0	11
	2	27	5	1	3	1	0	0	2	0	0	0	0	41
09:00	0	10	3	0	0	1	0	0	0	0	0	0	0	14
09:15	0	12	5	0	2	0	0	1	0	0	0	0	0	20
09:30	0	12	3	0	1	0	0	1	1	0	0	0	0	18
09:45	0	8	3	0	0	0	0	0	1	0	0	0	0	12
	0	42	14	0	3	1	0	2	2	0	0	0	0	64
10:00	0	16	1	0	4	0	0	2	1	0	0	0	0	24
10:15	0	6	5	0	1	0	0	1	0	0	0	0	0	13
10:30	0	6	2	0	0	0	0	0	0	0	0	0	0	8
10:45	0	11	5	1	2	0	0	1	1	0	0	0	0	21
	0	39	13	1	7	0	0	4	2	0	0	0	0	66
11:00	0	9	2	1	0	0	0	1	0	0	0	0	0	13
11:15	0	8	3	1	2	0	0	1	0	0	0	0	0	15
11:30	1	9	3	0	1	2	0	1	0	0	0	0	0	17
11:45	0	9	2	0	2	0	0	0	0	0	0	0	0	13
	1	35	10	2	5	2	0	3	0	0	0	0	0	58
Total	9	228	80	8	40	7	0	12	14	1	0	0	0	399
Percent	2.3%	57.1%	20.1%	2.0%	10.0%	1.8%	0.0%	3.0%	3.5%	0.3%	0.0%	0.0%	0.0%	

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Site Code: 1
Station ID: 1
SR 16 - MACON HWY SOUTH OF
SHORT CREEK BRIDGE
Latitude: 0' 0.0000 Undefined

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	0	6	2	0	2	0	0	0	0	0	0	0	0	10
12:15	0	11	1	0	2	0	0	1	1	0	0	0	0	16
12:30	0	10	1	1	2	0	0	0	1	0	0	0	0	15
12:45	0	10	1	0	0	0	0	0	0	0	0	0	0	11
	0	37	5	1	6	0	0	1	2	0	0	0	0	52
13:00	0	7	1	1	2	0	0	1	1	0	0	0	0	13
13:15	4	16	2	0	2	0	0	1	0	0	0	0	0	25
13:30	0	5	1	0	0	0	0	1	0	0	0	0	0	7
13:45	1	11	2	1	2	0	0	0	1	0	0	0	0	18
	5	39	6	2	6	0	0	3	2	0	0	0	0	63
14:00	0	10	4	0	0	0	0	0	0	0	0	0	0	14
14:15	0	4	2	0	0	0	0	1	0	0	0	0	0	7
14:30	0	9	5	0	5	0	0	0	0	0	0	0	0	19
14:45	0	13	4	0	1	0	0	2	0	0	0	0	0	20
	0	36	15	0	6	0	0	3	0	0	0	0	0	60
15:00	0	6	2	0	0	1	0	2	2	0	0	0	0	13
15:15	0	6	4	0	1	2	0	0	0	0	0	0	0	13
15:30	0	6	2	0	1	0	0	0	1	0	0	0	0	10
15:45	0	8	5	0	0	0	0	1	2	0	0	0	0	16
	0	26	13	0	2	3	0	3	5	0	0	0	0	52
16:00	0	9	3	0	3	2	0	0	0	0	0	0	0	17
16:15	0	8	2	0	1	1	0	1	0	0	0	0	0	13
16:30	0	7	3	1	1	0	0	1	0	0	0	0	0	13
16:45	0	12	7	0	3	0	0	0	1	0	0	0	0	23
	0	36	15	1	8	3	0	2	1	0	0	0	0	66
17:00	0	18	0	0	0	0	0	2	1	0	0	0	0	21
17:15	0	7	1	0	1	0	0	0	0	0	0	0	0	9
17:30	0	6	2	0	3	1	0	3	0	0	0	0	0	15
17:45	0	10	3	0	3	1	0	1	0	0	0	0	0	18
	0	41	6	0	7	2	0	6	1	0	0	0	0	63
18:00	0	10	2	0	1	0	0	0	0	0	0	0	0	13
18:15	0	13	1	0	3	0	0	1	0	0	0	0	0	18
18:30	0	6	3	0	1	0	0	0	0	0	0	0	0	10
18:45	0	10	0	0	1	0	0	0	0	0	0	0	0	11
	0	39	6	0	6	0	0	1	0	0	0	0	0	52
19:00	0	9	3	0	1	0	0	0	0	0	0	0	0	13
19:15	0	8	1	0	0	0	0	1	0	0	0	0	0	10
19:30	0	4	0	0	1	0	0	0	0	0	0	0	0	5
19:45	0	5	1	0	1	0	0	1	0	0	0	0	0	8
	0	26	5	0	3	0	0	2	0	0	0	0	0	36
20:00	0	7	3	0	1	0	0	1	0	0	0	0	0	12
20:15	0	4	0	0	1	0	0	0	0	0	0	0	0	5
20:30	0	8	1	0	0	0	0	0	0	0	0	0	0	9
20:45	0	3	2	0	1	0	0	1	1	0	0	0	0	8
	0	22	6	0	3	0	0	2	1	0	0	0	0	34
21:00	1	3	1	0	0	1	0	0	0	0	0	0	0	6
21:15	0	2	1	0	0	0	0	0	0	0	0	0	0	3
21:30	0	5	0	0	0	0	0	0	2	0	0	0	0	7
21:45	0	1	1	0	0	0	0	0	0	0	0	0	0	2
	1	11	3	0	0	1	0	0	2	0	0	0	0	18
22:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6
22:15	0	6	4	0	0	0	0	0	0	0	0	0	0	10
22:30	0	0	0	0	0	0	0	0	1	0	0	0	0	1
22:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4
	0	15	5	0	0	0	0	0	1	0	0	0	0	21
23:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
23:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2
23:30	0	2	1	0	0	0	0	1	0	0	0	0	0	4
23:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
	0	7	2	0	0	0	0	1	0	0	0	0	0	10
Total	6	335	87	4	47	9	0	24	15	0	0	0	0	527
Percent	1.1%	63.6%	16.5%	0.8%	8.9%	1.7%	0.0%	4.6%	2.8%	0.0%	0.0%	0.0%	0.0%	

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Site Code: 1
Station ID: 1
SR 16 - MACON HWY SOUTH OF
SHORT CREEK BRIDGE
Latitude: 0' 0.0000 Undefined

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
04/12/18	0	2	0	0	0	0	0	0	0	0	0	0	0	2
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	3	0	0	0	0	0	0	0	0	0	0	0	3
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	1	0	0	0	0	0	1
01:30	0	0	1	0	0	0	0	0	1	0	0	0	0	2
01:45	1	0	0	0	0	1	0	0	0	0	0	0	0	2
	1	0	1	0	0	1	0	1	1	0	0	0	0	5
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	1	1	0	0	0	0	2
03:45	0	1	1	0	0	0	0	0	0	0	0	0	0	2
	0	1	1	0	0	0	0	1	1	0	0	0	0	4
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
04:15	0	5	0	0	1	0	0	0	0	0	0	0	0	6
04:30	0	3	2	0	0	0	0	0	0	0	0	0	0	5
04:45	0	4	1	0	0	0	0	1	0	0	0	0	0	6
	0	12	3	0	2	0	0	1	0	0	0	0	0	18
05:00	0	5	1	1	1	0	0	2	1	0	0	0	0	11
05:15	0	5	0	0	0	0	0	0	0	0	0	0	0	5
05:30	0	6	2	0	1	0	0	1	0	0	0	0	0	10
05:45	1	5	1	0	0	1	0	0	0	0	0	0	0	8
	1	21	4	1	2	1	0	3	1	0	0	0	0	34
06:00	0	8	2	0	1	0	0	0	0	0	0	0	0	11
06:15	0	9	2	0	2	0	0	0	0	0	0	0	0	13
06:30	0	11	2	1	1	0	0	2	1	0	0	0	0	18
06:45	1	12	0	0	2	0	0	0	0	0	0	0	0	15
	1	40	6	1	6	0	0	2	1	0	0	0	0	57
07:00	0	10	3	0	2	0	0	0	0	0	0	0	0	15
07:15	1	11	3	1	4	0	0	0	0	0	0	0	0	20
07:30	0	4	5	0	2	0	0	0	1	0	0	0	0	12
07:45	0	15	4	0	5	0	0	3	1	0	0	0	0	28
	1	40	15	1	13	0	0	3	2	0	0	0	0	75
08:00	0	4	5	0	1	0	0	0	0	0	0	0	0	10
08:15	0	5	3	0	2	0	0	0	0	0	0	0	0	10
08:30	1	8	3	0	2	1	0	1	0	0	0	0	0	16
08:45	1	11	2	0	3	1	0	0	2	0	0	0	0	20
	2	28	13	0	8	2	0	1	2	0	0	0	0	56
09:00	0	8	2	1	0	0	0	2	1	0	0	0	0	14
09:15	0	6	2	1	1	0	0	1	0	0	0	0	0	11
09:30	0	6	5	0	3	0	0	0	0	0	0	0	0	14
09:45	0	8	1	0	2	0	0	2	2	0	0	0	0	15
	0	28	10	2	6	0	0	5	3	0	0	0	0	54
10:00	0	6	2	0	1	0	0	1	0	0	0	0	0	10
10:15	1	8	6	1	3	0	0	4	0	0	0	0	0	23
10:30	1	3	1	0	1	1	0	1	0	0	0	0	0	8
10:45	0	5	4	0	3	0	0	0	1	0	0	0	0	13
	2	22	13	1	8	1	0	6	1	0	0	0	0	54
11:00	0	8	1	0	1	0	0	1	0	0	0	0	0	11
11:15	0	10	3	0	3	0	0	1	0	0	0	0	0	17
11:30	0	6	5	0	3	1	0	1	0	0	0	0	0	16
11:45	0	7	2	0	1	0	0	0	0	0	0	0	0	10
	0	31	11	0	8	1	0	3	0	0	0	0	0	54
Total	8	227	77	6	53	6	0	26	12	0	0	0	0	415
Percent	1.9%	54.7%	18.6%	1.4%	12.8%	1.4%	0.0%	6.3%	2.9%	0.0%	0.0%	0.0%	0.0%	

All Traffic Data Services, Inc

1336 Farmer Road
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Site Code: 1
Station ID: 1
SR 16 - MACON HWY SOUTH OF
SHORT CREEK BRIDGE
Latitude: 0' 0.0000 Undefined

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	1	9	4	0	0	1	0	0	0	0	0	0	0	15
12:15	0	12	2	1	4	0	0	0	0	0	0	0	0	19
12:30	0	13	2	0	4	1	0	0	0	0	0	0	0	20
12:45	0	6	4	1	3	0	0	1	2	0	0	0	0	17
13:00	1	40	12	2	11	2	0	1	2	0	0	0	0	71
13:15	1	9	2	0	2	0	0	3	0	0	0	0	0	17
13:30	0	17	3	0	0	0	0	1	0	0	0	0	0	21
13:45	0	9	3	3	3	0	0	1	0	0	0	0	0	19
14:00	1	6	0	0	1	0	0	2	0	0	0	0	0	10
14:15	2	41	8	3	6	0	0	7	0	0	0	0	0	67
14:30	0	9	4	0	2	0	0	0	2	0	0	0	0	17
14:45	0	4	1	1	1	0	0	0	0	0	0	0	0	7
15:00	1	15	2	1	1	0	0	0	3	0	0	0	0	23
15:15	2	8	4	0	1	0	0	1	1	0	0	0	0	17
15:30	3	36	11	2	5	0	0	1	6	0	0	0	0	64
15:45	0	7	6	0	0	0	0	3	0	0	0	0	0	16
16:00	0	7	3	0	0	0	0	2	0	0	0	0	0	12
16:15	0	2	4	0	1	1	0	0	1	0	0	0	0	9
16:30	0	4	2	0	0	0	0	0	1	0	0	0	0	7
16:45	0	20	15	0	1	1	0	5	2	0	0	0	0	44
17:00	0	10	3	0	1	0	0	0	0	0	0	0	0	14
17:15	0	9	0	0	1	1	0	0	0	0	0	0	0	11
17:30	0	14	4	1	0	1	0	1	3	0	0	0	0	24
17:45	0	10	4	1	2	0	0	0	0	0	0	0	0	17
18:00	0	43	11	2	4	2	0	1	3	0	0	0	0	66
18:15	1	8	3	0	2	0	0	0	0	0	0	0	0	14
18:30	1	13	3	0	1	0	0	1	0	0	0	0	0	19
18:45	0	12	5	0	3	2	0	0	0	0	0	0	0	22
19:00	0	13	1	0	4	0	0	0	0	0	0	0	0	18
19:15	2	46	12	0	10	2	0	1	0	0	0	0	0	73
19:30	0	12	4	0	3	0	0	4	0	0	0	0	0	23
19:45	0	12	3	0	2	0	0	1	2	0	0	0	0	20
20:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
20:15	0	7	1	0	1	0	0	0	0	0	0	0	0	9
20:30	0	36	8	0	6	0	0	5	2	0	0	0	0	57
20:45	0	11	2	0	2	0	0	0	0	0	0	0	0	15
21:00	0	11	0	1	1	0	0	0	0	0	0	0	0	13
21:15	0	10	5	0	0	0	0	0	1	0	0	0	0	16
21:30	0	5	2	0	0	0	0	0	0	0	0	0	0	7
21:45	0	37	9	1	3	0	0	0	1	0	0	0	0	51
22:00	0	5	1	0	1	0	0	1	0	0	0	0	0	8
22:15	1	4	0	0	0	1	0	1	1	0	0	0	0	8
22:30	0	1	2	1	2	0	0	0	0	0	0	0	0	6
22:45	0	0	2	0	0	0	0	1	1	0	0	0	0	4
23:00	1	10	5	1	3	1	0	3	2	0	0	0	0	26
23:15	0	4	0	0	0	0	0	0	1	0	0	0	0	6
23:30	0	5	1	0	0	1	0	0	0	0	0	0	0	7
23:45	0	6	1	1	1	0	0	0	0	0	0	0	0	9
24:00	0	5	1	0	1	0	0	0	0	0	0	0	0	7
24:15	0	20	3	2	2	1	0	0	1	0	0	0	0	29
24:30	0	8	2	0	1	0	0	0	0	0	0	0	0	11
24:45	0	4	1	0	0	0	0	0	1	0	0	0	0	6
25:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5
25:15	0	1	0	0	0	0	0	0	1	0	0	0	0	2
25:30	0	17	4	0	1	0	0	0	2	0	0	0	0	24
25:45	0	3	1	0	0	0	0	0	0	0	0	0	0	4
26:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
26:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
26:30	0	0	1	0	0	0	0	0	0	0	0	0	0	1
26:45	0	0	1	0	0	0	0	0	0	0	0	0	0	1
27:00	0	5	3	0	0	0	0	0	0	0	0	0	0	8
Total	9	351	101	13	52	9	0	24	21	0	0	0	0	580
Percent	1.6%	60.5%	17.4%	2.2%	9.0%	1.6%	0.0%	4.1%	3.6%	0.0%	0.0%	0.0%	0.0%	
Grand Total	32	1141	345	31	192	31	0	86	62	1	0	0	0	1921
Percent	1.7%	59.4%	18.0%	1.6%	10.0%	1.6%	0.0%	4.5%	3.2%	0.1%	0.0%	0.0%	0.0%	

All Traffic Data Services, Inc

1336 Farmer Road
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Site Code: 1
Station ID: 1
SR 16 - MACON HWY SOUTH OF
SHORT CREEK BRIDGE
Latitude: 0' 0.0000 Undefined

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
04/11/18	0	0	1	0	1	0	0	0	0	0	0	0	0	2
00:15	0	0	3	0	0	0	0	0	0	0	0	0	0	3
00:30	0	0	1	0	0	0	0	0	0	0	0	0	0	1
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	5	0	1	0	0	0	0	0	0	0	0	6
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:15	0	0	2	0	0	0	0	0	0	0	0	0	0	2
01:30	0	0	1	0	1	0	0	0	0	0	0	0	0	2
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	3	0	1	0	0	0	0	0	0	0	0	5
02:00	0	0	0	0	0	0	0	0	1	0	0	0	0	1
02:15	0	0	3	0	0	0	0	0	0	0	0	0	0	3
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	3	0	0	0	0	0	1	0	0	0	0	4
03:00	0	1	4	0	0	0	0	0	0	0	0	0	0	5
03:15	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	2	5	0	0	0	0	0	0	0	0	0	0	7
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	1	2	0	0	0	0	0	0	0	0	0	0	3
04:30	0	1	0	1	0	0	0	0	0	0	0	0	0	2
04:45	0	3	0	0	1	0	0	0	0	0	0	0	0	4
	0	5	2	1	1	0	0	0	0	0	0	0	0	9
05:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
05:15	1	3	2	0	0	1	0	0	0	0	0	0	0	7
05:30	0	3	0	0	1	1	0	0	1	0	0	0	0	6
05:45	1	3	1	2	3	1	0	0	0	0	0	0	0	11
	2	12	3	2	4	3	0	0	1	0	0	0	0	27
06:00	0	0	3	0	1	0	0	1	0	0	0	0	0	5
06:15	0	3	1	1	1	0	0	1	0	0	0	0	0	7
06:30	0	3	2	0	1	0	0	1	0	0	0	0	0	7
06:45	0	2	4	1	3	0	0	0	1	0	0	0	0	11
	0	8	10	2	6	0	0	3	1	0	0	0	0	30
07:00	0	4	4	0	2	0	0	0	1	0	0	0	0	11
07:15	0	2	4	0	2	0	0	0	0	0	0	0	0	8
07:30	0	6	8	0	0	0	0	0	0	0	0	0	0	14
07:45	0	7	8	0	3	0	0	0	0	0	0	0	0	18
	0	19	24	0	7	0	0	0	1	0	0	0	0	51
08:00	0	2	6	0	0	1	0	0	1	0	0	0	0	10
08:15	0	4	4	0	1	0	0	1	1	0	0	0	0	11
08:30	0	5	5	1	2	1	0	0	0	0	0	0	0	14
08:45	0	4	5	0	2	0	0	2	0	0	0	0	0	13
	0	15	20	1	5	2	0	3	2	0	0	0	0	48
09:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
09:15	0	2	3	1	2	0	0	0	0	0	0	0	0	8
09:30	2	3	6	0	4	2	0	0	1	0	0	0	0	18
09:45	0	4	7	0	3	0	0	2	0	0	0	0	0	16
	2	12	17	1	9	2	0	2	1	0	0	0	0	46
10:00	0	5	1	0	1	0	0	0	1	0	0	0	0	8
10:15	0	9	7	0	2	1	0	1	0	1	0	0	0	21
10:30	0	4	2	0	3	1	0	0	0	0	0	0	0	10
10:45	0	5	2	0	0	0	0	3	0	0	0	0	0	10
	0	23	12	0	6	2	0	4	1	1	0	0	0	49
11:00	0	3	4	0	2	0	0	0	0	0	0	0	0	9
11:15	0	7	2	0	2	0	0	0	0	0	0	0	0	11
11:30	0	5	1	0	3	0	0	0	2	0	0	0	0	11
11:45	0	5	3	1	2	0	0	2	1	0	0	0	0	14
	0	20	10	1	9	0	0	2	3	0	0	0	0	45
Total	4	117	114	8	49	9	0	14	11	1	0	0	0	327
Percent	1.2%	35.8%	34.9%	2.4%	15.0%	2.8%	0.0%	4.3%	3.4%	0.3%	0.0%	0.0%	0.0%	

All Traffic Data Services, Inc

1336 Farmer Road
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ph 404-374-1283

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Site Code: 1
Station ID: 1
SR 16 - MACON HWY SOUTH OF
SHORT CREEK BRIDGE
Latitude: 0' 0.0000 Undefined

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	1	9	5	1	4	0	0	2	0	0	0	0	0	22
12:15	0	11	1	0	4	0	0	2	0	0	0	0	0	18
12:30	0	7	1	0	2	0	0	1	0	0	0	0	0	11
12:45	0	6	2	0	3	0	0	2	0	0	0	0	0	13
13:00	1	33	9	1	13	0	0	7	0	0	0	0	0	64
13:15	0	5	4	0	1	1	0	0	0	0	0	0	0	11
13:30	0	4	2	0	0	0	0	0	0	0	0	0	0	6
13:45	0	8	2	0	2	0	0	0	0	0	0	0	0	12
14:00	1	9	3	0	2	1	0	0	0	0	0	0	0	16
14:15	1	26	11	0	5	2	0	0	0	0	0	0	0	45
14:30	0	4	5	1	2	0	0	1	1	0	0	0	0	14
14:45	0	6	3	0	3	1	0	0	0	0	0	0	0	13
15:00	0	8	1	0	0	1	0	2	0	0	0	0	0	12
15:15	0	6	1	0	1	0	0	0	1	0	0	0	0	9
15:30	0	24	10	1	6	2	0	3	2	0	0	0	0	48
15:45	0	9	2	0	4	0	0	0	0	0	0	0	0	15
16:00	0	9	5	1	1	1	0	0	0	0	0	0	0	17
16:15	0	9	5	0	2	0	0	1	0	0	0	0	0	17
16:30	1	9	3	0	2	2	0	0	0	0	0	0	0	17
16:45	1	36	15	1	9	3	0	1	0	0	0	0	0	66
17:00	0	11	3	0	5	0	0	1	0	0	0	0	0	20
17:15	0	8	1	0	3	0	0	1	0	0	0	0	0	13
17:30	0	10	4	0	0	0	0	0	0	0	0	0	0	14
17:45	0	8	4	0	3	0	0	0	0	0	0	0	0	15
18:00	0	37	12	0	11	0	0	2	0	0	0	0	0	62
18:15	0	13	4	0	3	0	0	0	0	0	0	0	0	20
18:30	1	9	6	1	2	1	0	1	0	0	0	0	0	21
18:45	0	9	3	1	3	0	0	2	0	0	0	0	0	18
19:00	0	5	4	0	1	0	0	1	0	0	0	0	0	11
19:15	1	36	17	2	9	1	0	4	0	0	0	0	0	70
19:30	0	8	6	1	4	0	0	0	0	0	0	0	0	19
19:45	0	13	6	0	1	0	0	1	0	0	0	0	0	21
20:00	0	8	1	0	2	0	0	0	0	0	0	0	0	11
20:15	0	4	5	0	4	0	0	0	0	0	0	0	0	13
20:30	0	33	18	1	11	0	0	1	0	0	0	0	0	64
20:45	0	3	1	0	0	0	0	1	0	0	0	0	0	5
21:00	0	4	5	0	0	0	0	0	0	0	0	0	0	9
21:15	0	4	4	0	2	0	0	0	0	0	0	0	0	10
21:30	0	2	3	0	4	0	0	0	0	0	0	0	0	9
21:45	0	13	13	0	6	0	0	1	0	0	0	0	0	33
22:00	0	4	3	0	1	1	0	0	1	0	0	0	0	10
22:15	0	2	6	0	2	0	0	0	0	0	0	0	0	10
22:30	0	3	5	0	0	0	0	0	0	0	0	0	0	8
22:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4
23:00	0	13	14	0	3	1	0	0	1	0	0	0	0	32
23:15	0	2	2	0	0	0	0	0	0	0	0	0	0	4
23:30	0	0	2	0	0	0	0	0	0	0	0	0	0	2
23:45	0	0	2	1	0	0	0	0	0	0	0	0	0	3
24:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
24:15	0	4	7	1	0	0	0	0	0	0	0	0	0	12
24:30	0	3	2	0	0	0	0	0	0	0	0	0	0	5
24:45	0	2	0	0	0	0	0	0	1	0	0	0	0	3
25:00	0	1	2	0	0	0	0	0	0	0	0	0	0	3
25:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25:30	0	6	4	0	0	0	0	0	1	0	0	0	0	11
25:45	0	2	3	1	0	0	0	0	0	0	0	0	0	6
26:00	0	3	2	0	1	0	0	0	0	0	0	0	0	6
26:15	1	0	0	0	0	2	0	0	0	0	0	0	0	3
26:30	0	0	1	0	0	0	0	0	0	0	0	0	0	1
26:45	1	5	6	1	1	2	0	0	0	0	0	0	0	16
Total	5	266	136	8	74	11	0	19	4	0	0	0	0	523
Percent	1.0%	50.9%	26.0%	1.5%	14.1%	2.1%	0.0%	3.6%	0.8%	0.0%	0.0%	0.0%	0.0%	

All Traffic Data Services, Inc

1336 Farmer Road
Covington, Ga 30012
ph 404-374-1283

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Site Code: 1
Station ID: 1
SR 16 - MACON HWY SOUTH OF
SHORT CREEK BRIDGE
Latitude: 0' 0.0000 Undefined

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
04/12/18	0	0	3	0	1	0	0	0	0	0	0	0	0	4
00:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
00:30	0	1	1	0	0	0	0	0	0	0	0	0	0	2
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	2	4	0	1	0	0	0	0	0	0	0	0	7
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	1	0	0	0	0	0	0	0	0	0	0	1
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:15	0	1	1	0	0	0	0	0	0	0	0	0	0	2
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:15	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:30	0	0	3	0	1	0	0	0	0	0	0	0	0	4
03:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:15	0	2	4	0	1	0	0	0	0	0	0	0	0	7
04:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	1	2	0	0	1	1	0	0	0	0	0	0	0	5
05:15	1	6	0	0	1	1	0	0	0	0	0	0	0	9
05:30	0	2	1	0	1	0	0	0	0	0	0	0	0	4
05:45	0	0	1	0	0	0	0	0	1	0	0	0	0	2
06:00	0	1	0	0	0	0	0	1	0	0	0	0	0	2
06:15	0	6	5	0	2	0	0	0	0	0	0	0	0	13
06:30	0	9	7	0	3	0	0	1	1	0	0	0	0	21
06:45	0	1	4	0	1	0	0	0	1	0	0	0	0	7
07:00	1	4	2	1	3	1	0	0	0	0	0	0	0	12
07:15	0	1	3	0	1	0	0	2	0	0	0	0	0	7
07:30	2	1	1	0	2	1	0	1	0	0	0	0	0	8
07:45	3	7	10	1	7	2	0	3	1	0	0	0	0	34
08:00	0	2	3	0	3	1	0	0	0	0	0	0	0	9
08:15	1	6	6	1	1	1	0	0	0	0	0	0	0	16
08:30	1	1	8	0	3	1	0	0	0	0	0	0	0	14
08:45	1	0	7	0	4	1	0	0	1	0	0	0	0	14
09:00	3	9	24	1	11	4	0	0	1	0	0	0	0	53
09:15	1	3	6	0	1	1	0	0	1	0	0	0	0	13
09:30	0	2	5	0	5	0	0	1	0	0	0	0	0	13
09:45	1	5	4	0	3	0	0	0	0	1	0	0	0	14
10:00	0	6	3	0	4	0	0	1	1	0	0	0	0	15
10:15	2	16	18	0	13	1	0	2	2	1	0	0	0	55
10:30	1	4	3	0	1	2	0	1	0	0	0	0	0	12
10:45	1	3	1	2	3	1	0	2	0	0	0	0	0	13
11:00	2	5	1	1	2	2	0	0	0	0	0	0	0	13
11:15	0	4	2	1	2	1	0	0	1	0	0	0	0	11
11:30	4	16	7	4	8	6	0	3	1	0	0	0	0	49
11:45	1	3	3	0	3	2	0	1	0	0	0	0	0	13
12:00	2	4	5	1	4	2	0	0	0	0	0	0	0	18
12:15	1	8	6	1	5	1	0	1	0	0	0	0	0	23
12:30	1	3	0	0	0	1	0	0	0	0	0	0	0	5
12:45	5	18	14	2	12	6	0	2	0	0	0	0	0	59
13:00	1	5	7	2	2	2	0	0	1	0	0	0	0	20
13:15	1	5	5	1	5	1	0	0	0	0	0	0	0	18
13:30	1	3	1	2	2	1	0	0	0	0	0	0	0	10
13:45	1	6	4	0	3	1	0	1	0	0	0	0	0	16
14:00	4	19	17	5	12	5	0	1	1	0	0	0	0	64
Total	22	105	108	13	69	25	0	12	7	1	0	0	0	362
Percent	6.1%	29.0%	29.8%	3.6%	19.1%	6.9%	0.0%	3.3%	1.9%	0.3%	0.0%	0.0%	0.0%	

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Page 8

Site Code: 1
Station ID: 1
SR 16 - MACON HWY SOUTH OF
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Latitude: 0' 0.0000 Undefined

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	0	4	3	0	0	1	0	0	1	0	0	0	0	9
12:15	0	7	5	1	3	0	0	3	1	0	0	0	0	20
12:30	1	2	4	1	2	1	0	0	0	0	0	0	0	11
12:45	0	4	4	0	3	0	0	0	2	0	0	0	0	13
	1	17	16	2	8	2	0	3	4	0	0	0	0	53
13:00	0	6	2	0	0	1	0	1	0	0	0	0	0	10
13:15	0	4	3	0	4	0	0	1	0	0	0	0	0	12
13:30	0	3	4	0	2	0	0	0	1	0	0	0	0	10
13:45	0	6	3	1	3	1	0	0	0	0	0	0	0	14
	0	19	12	1	9	2	0	2	1	0	0	0	0	46
14:00	0	7	2	0	1	0	0	1	0	0	0	0	0	11
14:15	1	6	2	0	4	0	0	0	0	0	0	0	0	13
14:30	0	5	6	0	1	0	0	1	0	0	0	0	0	13
14:45	0	6	2	1	2	0	0	0	0	0	0	0	0	11
	1	24	12	1	8	0	0	2	0	0	0	0	0	48
15:00	0	5	4	1	0	0	0	0	1	0	0	0	0	11
15:15	1	9	2	0	1	1	0	0	0	0	0	0	0	14
15:30	0	13	4	1	2	0	0	0	0	0	0	0	0	20
15:45	0	8	4	0	4	0	0	0	0	0	0	0	0	16
	1	35	14	2	7	1	0	0	1	0	0	0	0	61
16:00	0	13	12	0	5	0	0	4	0	0	0	0	0	34
16:15	0	16	4	1	4	0	0	2	0	0	0	0	0	27
16:30	0	10	5	0	2	0	0	2	0	0	0	0	0	19
16:45	0	9	4	0	3	0	0	3	0	0	0	0	0	19
	0	48	25	1	14	0	0	11	0	0	0	0	0	99
17:00	0	10	1	0	0	0	0	0	1	0	0	0	0	12
17:15	0	9	4	0	2	0	0	0	0	0	0	0	0	15
17:30	1	11	7	0	4	0	0	1	0	0	0	0	0	24
17:45	0	13	6	0	2	0	0	1	0	0	0	0	0	22
	1	43	18	0	8	0	0	2	1	0	0	0	0	73
18:00	0	9	3	0	2	0	0	0	0	0	0	0	0	14
18:15	0	10	4	0	1	0	0	1	0	0	0	0	0	16
18:30	0	5	2	0	0	0	0	0	0	0	0	0	0	7
18:45	0	5	0	0	2	0	0	0	0	0	0	0	0	7
	0	29	9	0	5	0	0	1	0	0	0	0	0	44
19:00	0	10	2	0	2	0	0	0	0	0	0	0	0	14
19:15	0	5	6	0	3	0	0	0	0	0	0	0	0	14
19:30	0	6	2	0	0	0	0	0	0	0	0	0	0	8
19:45	0	5	2	0	0	0	0	0	0	0	0	0	0	7
	0	26	12	0	5	0	0	0	0	0	0	0	0	43
20:00	0	9	0	0	1	0	0	0	0	0	0	0	0	10
20:15	0	5	5	0	1	0	0	0	0	0	0	0	0	11
20:30	0	5	2	0	1	0	0	0	0	0	0	0	0	8
20:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4
	0	23	7	0	3	0	0	0	0	0	0	0	0	33
21:00	0	3	0	0	2	0	0	0	0	0	0	0	0	5
21:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
21:30	1	0	2	0	0	1	0	0	0	0	0	0	0	4
21:45	0	4	2	1	1	0	0	0	0	0	0	0	0	8
	1	10	4	1	3	1	0	0	0	0	0	0	0	20
22:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
22:15	0	2	2	0	1	0	0	1	0	0	0	0	0	6
22:30	0	3	2	0	0	0	0	0	0	0	0	0	0	5
22:45	0	1	0	0	1	0	0	0	0	0	0	0	0	2
	0	7	4	0	2	0	0	1	0	0	0	0	0	14
23:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2
23:15	1	1	1	2	2	0	0	0	0	0	0	0	0	7
23:30	0	0	1	0	0	0	0	0	0	0	0	0	0	1
23:45	1	0	2	0	0	1	0	0	0	0	0	0	0	4
	2	1	6	2	2	1	0	0	0	0	0	0	0	14
Total	7	282	139	10	74	7	0	22	7	0	0	0	0	548
Percent	1.3%	51.5%	25.4%	1.8%	13.5%	1.3%	0.0%	4.0%	1.3%	0.0%	0.0%	0.0%	0.0%	
Grand Total	38	770	497	39	266	52	0	67	29	2	0	0	0	1760
Percent	2.2%	43.8%	28.2%	2.2%	15.1%	3.0%	0.0%	3.8%	1.6%	0.1%	0.0%	0.0%	0.0%	

Bridge Inventory Data Listing Georgia Department of Transportation

Processed Date:4/7/2017

Parameters: Bridge Serial Number

Bridge Serial Number: 301-0004-0

County: Warren

SUFF. RATING: 56.4

Location & Geography			218 Datum:		0- Not Applicable		Signs & Attachments	
Structure ID:	301-0004-0		*19 Bypass Length:	8			225 Expansion Joint Type:	02- Open or sealed concrete joint (silicone sealant).
200 Bridge Information:	06		*20 Toll:	3- On a Free Road or Non-Highway			242 Deck Drains:	1- Open Scuppers.
*6 Feature Intersected:	SHORT CREEK		*21 Maintenance Responsibility:	01-State Highway Agency.			243A Parapet Location:	0- None present.
*7A Route Number Carried:	SR00016		*22 Owner:	01-State Highway Agency.			243B Parapet Height:	0.00
*7B Facility Carried:	SR 16		*31 Design Load:	2- H 15			243C Parapet Width:	0.00
9 Location:	6.5 MI SW OF WARRENTON		37 Historical Significance:	5- Not eligible for the National Register of Historic Places			238A Curb Height:	1.2
2 GDOT District:	4841200000 - D2 District Two Tennille		205 Congressional District:	010			238B Curb Material:	1- Concrete.
*91 Inspection Frequency:	24	Date: 01/31/2017	27 Year Constructed:	1937			239A Handrail Left:	1- Concrete.
92A Fracture Critical Insp. Freq:	0	Date: 02/01/1901	106 Year Reconstructed:	0			239B Handrail Right:	1- Concrete.
92B Underwater Insp Freq:	0	Date: 02/01/1901	33 Bridge Median:	0-None			*240 Median Barrier Rail:	0- None.
92C Other Spc. Insp Freq:	0	Date: 02/01/1901	34 Skew:	0			241A Bridge Median Height:	0
* 4 Place Code:	00000		35 Structure Flared:	No			241B Bridge Median Width:	0
*5A Inventory Route(O/U):	1		38 Navigation Control:	0- Navigation is not controlled by an Agency			*230A Guardrail Location Direction Rear:	3- Both sides.
5B Route Type:	3 - State		213 Special Steel Design:	0- Not applicable or other			*230B Guardrail Location Direction Fwrd:	3- Both sides.
5C Service Designation:	1- Mainline		267A Type Paint Super Structure:	2- Non-Lead Oil Alkyd System (System IV). Year : 1993			*230C Guardrail Location Opposing Rear:	0- None.
5D Route Number:	00016		267B Type Paint Sub Structure:	0- Not Applicable Year : 0000			*230D Guardrail Location Opposing Fwrd:	0- None.
5E Directional Suffix:	0. Not applicable		*42A Type of Service On:	1-Highway			244 Approach Slab:	3- Forward and Rear.
*16 Latitude:	33 - 19.8545		*42B Type of Service Under:	5-Waterway			224 Retaining Wall:	0- None.
*17 Longitude:	82 - 43.6633		214A Movable Bridge:	0			233 Posted Speed Limit:	55
98A Border Bridge:	0	98B: GA% 00	214B Operator on Duty:	0			236 Warning Sign:	Yes
99 ID Number:	0000000000000000		203 Type Bridge:	A- Spread footing. O. Concrete M. Steel O. Concrete			234 Delineator:	Yes
*100 STRAHNET:	0- The Feature is not a STRAHNET route.		259 Pile Encasement:	3			235 Hazard Boards:	Yes
12 Base Highway Network:	Yes		*43A Structure Type Main material:	3-Steel			237A Gas:	00- Not Applicable
13A LRS Inventory Route:	3011001600		*43B Structure Type Main Type:	2-Stringer/Multi-Beam or Girder			237B Water:	00- Not Applicable
13B Sub Inventory Route:	0		45 Number of Main Spans:	2			237C Electric:	00- Not Applicable
101 Parallel Structure:	N. No parallel structure exists		44 Structure Type Approach:	A:0- Other B: 0- Other			237D Telephone:	31- Side Left.
*102 Direction of Traffic:	2- Two Way		46 Number of Approach Spans:	0			237E Sewer:	00- Not Applicable
*264 Road Inventory Mile Post:	4.63		226 Bridge Curve:	A: Vertical: NoB: Horizontal: No			247A Lighting: Street:	No
*208 Inspection Area:	Area 02		111 Pier Protection:	N - Navigation Control item coded 0, or Feature not a waterway			247B Navigation:	No
*104 Highway System:	0- Inventory Route is not on the NHS		107 Deck Structure Type:	1 - C-I-P Portland Cement Concrete - Epoxy Coated Rebars			247C Aerial:	No
*26 Functional Classification:	6- Rural - Minor Arterial		108A Wearing Surface Type:	6. Bituminous			*248 County Continuity No.:	08
*204A Federal Route Type:	F - Primary.		108B Membrane Type:	8. Unknown			36A Bridge Railings:	2- Inspected feature meets acceptable construction date standards.
*204B Federal Route Number:	00042		108C Deck Protection:	8. Unknown			36B Transition:	2- Inspected feature meets acceptable construction date standards.
105 Federal Lands Highway:	0. Not applicable		265 Underwater Inspection Area:	0			36C Approach Guardrail:	2- Inspected feature meets acceptable construction date standards.
*110 Truck Route:	0- The Feature is not part of the National Network for Trucks						36D Approach Guardrail Ends:	2- Inspected feature meets acceptable construction date standards.
217 Benchmark Elevation:	0000.00							
* Location ID No:	301-00016D-004.65E							

Bridge Inventory Data Listing Georgia Department of Transportation

Processed Date:4/7/2017

Bridge Serial Number: 301-0004-0

County: Warren

SUFF. RATING: 56.4

Programming Data

201 Project Number:	FAP NRH 138-A REOP
202 Plans Available:	4- Plans in InfoMgave.
249 Proposed Project Number:	BRG-0007-00(057)
250A Reconstruction Approval Status:	No
250B Route Approval Status:	No
250C Approval Status Definition:	0
250D Approval Status Federal:	0
251Project Identification Number:	0007057
252 Contract Date:	02/01/1901
260 Seismic Number:	00000
75A Type Work Proposed:	34- Widening with deck rehabilitation or replacement
75B Work Done by:	1- Work to be done by contract
94 Bridge Improvement Cost:(X\$1,000)	\$250
95 Roadway Improvement Cost: (X\$1,000)	\$25
96 Total Improvement Cost: (X\$1,000)	\$375
76 Improvement Length:	1384.0'
97 Year Improvement Cost Based On:	2013
114 Future AADT:	2145
115 Future AADT Year:	2031

Measurements:

*29 AADT:		1430	
*30 AADT Year:		2011	
109 % Truck Traffic:		1	
* 28A Lanes On:		2	
*28B Lanes Under:		0	
210A Tracks On:		00	
210B Tracks Under:		0	
* 48 Maximum Span Length:		32	
* 49 Structure Length:		64	
51 Bridge Roadway Width:		23.8'	
52 Deck Width:		26.5'	
* 47 Total Horizontal Clearance:		23.8'	
50A Curb / Sidewalk Width Left:		0.6	
50B Curb / Sidewalk Width Right:		0.6	
32 Approach Rdwy. Width:		29.0'	
*229 Approach Roadway			
Rear Shoulder Left: Width:	3.3	Right Width:3.0	Type: 2 - Asphalt.
Fwd Shoulder: Left Width:	3.3	Right Width:3.0	Type: 2 - Asphalt.
Rear Pavement: Width:	22.400000000000 0002	Type:2- Asphalt.	
Forward Pavement: Width:	22.400000000000 0002	Type:2- Asphalt.	
Intersection Rear:	0	Forward:0	

Ratings and Posting

65 Inventory Rating Method:	1-Load Factor (LF)	
63 Operating Rating Method:	1-Load Factor (LF)	
66A Inventory Type:	2 - HS loading.	
66B Inventory Rating:	25	
64A Operating Type:	2 - HS loading.	
64B Operating Rating:	41	
231 Calculated Loads		Posting Required
231A H-Modified:	21	No
231B Type3/Tandem:	23	No
231C Timber:	31	No
231D HS-Modified:	26	No
231E Type 3S2:	36	No
231F Piggyback:	40	No
261 H Inventory Rating:	18	
262 H Operating Rating:	30	
67 Structural Evaluation:	5	
58 Deck Condition:	5 - Fair Condition	
59 Superstructure Condition:	5 - Fair Condition	
* 227 Collision Damage:		
60A Substructure Condition:	6 - Satisfactory Condition	
60B Scour Condition:	8 - Very Good Condition	
60C Underwater Condition:	N - Not Applicable	
71 Waterway Adequacy:	8-Equal to present desirable criteria.	
61 Channel Protection Cond.:	7-Better than present minimum criteria.	
68 Deck Geometry:	4	
69 UnderClr. Horz/Vert:	N	
72 Approach Alignment:	7-Between 8 and 6	
62 Culvert:	N - Not Applicable	
70 Bridge Posting Required:	5. Equal to or above legal loads	
41 Struct Open, Posted, CL:	A. Open, no restriction	
* 103 Temporary Structure:	No	
232 Posted Loads		
232A H-Modified:	00	
232B Type3/Tandem:	00	
232C Timber:	00	
232D HS-Modified:	00	
232E Type 3s2:	00	
232F Piggyback:	00	
253 Notification Date:	02/01/1901	
258 Federal Notify Date:	02/01/1901	

Hydraulic Data

113	Scour Critical:	U. No Load Rating; no scour critical data entered.
216A	Water Depth:	1
216B	Bridge Height:	11
222	Slope Protection:	1
221A	Spur Dike Rear:	
221B	Spur Dike Fwd:	
219	Fender System:	0- None.
220	Dolphin:	
223A	Culvert Cover:	000
223B	Culvert Type:	0- Not Applicable
223C	Number of Barrels:	0
223D	Barrel Width:	0.0
223E	Barrel Height:	0.0
223F	Culvert Length:	0.0
223G	Culvert Apron:	0
39	Navigation Vertical Clearance:	0'
40	Navigation Horizontal Clearance:	0
116	Navigation Vertical Clear Closed:	0

Meeting Minutes

Date: December 6, 2017 Time: 11:00 am
 Location: GDOT, Room 302 OGC (lobby level)
 Project: PI No. 0007057, SR 16 @ Short Creek, Warren County
 Subject: Kick-off Meeting
 Recorded By: Darren Wilton

<u>Attendees</u>	<u>Organization</u>	<u>Phone</u>	<u>Email</u>
Kim Chapman	GDOT	770-499-1161	kchapman@dot.ga.gov
David Borchardt	GDOT-ENV-NEPA	404-631-1184	DBorchardt@dot.ga.gov
Todd Price	GDOT-D2-Precon E	478-553-3405	tprice@dot.ga.gov
Clayton Sanders	GDOT-D2-UTL	478-553-3382	dsanders@dot.ga.gov
Jamie Lindsey	GDOT-D2-DUE	478-553-3385	jlindsey@dot.ga.gov
Darren Wilton	Moffatt & Nichol	404-205-8530	dwilton@moffattnichol.com
Chris Marsengill	Moffatt & Nichol	912-231-0044	cmarsengill@moffattnichol.com

- Kim Chapman began the meeting with introductions of all meeting attendees and everyone's role in the project.
- Kim stated the purpose of the meeting is to kickoff Master Contract: MPOPD1701685
 - TO#1: PI 0007057 (Warren County)
 - TO#2: PI 0013998 (Oconee & Walton County) (separate meeting minutes)
 - TO#3: PI 0014903 (Morgan County) (separate meeting minutes)
- The GDOT environmental lead would be David Borchardt instead of those listed in the meeting agenda:
 - ~~PI 0007057: TBD~~
- Concept Report will be "Limited Scope" template. It was noted to check for updated versions as changes are made regularly.
- The use of an off-site detour is usually the preferred alternative unless it is determined that an on-site detour is necessary. Kim will send example off-site detour maps. Detour maps should be submitted early for stakeholder outreach to occur.
- R/W estimate should be submitted as soon as layouts are ready to give GDOT time to perform the estimate. Document in the Concept Report when the R/W estimate request was submitted.
- For submittals, Kim requested to submit one day prior to the "submit to PM" date on the schedule to allow enough time for processing the submittal.
- Chris asked if an updated P6 schedule was available yet. Kim provided AECOM 411 schedules ahead of the meeting. Kim stated that she will provide "What-if" P6 project schedules with January 2018 NTP date for the team to reference for target submittal dates to keep project development ahead of schedule.

- Kim stated that status meetings will need to occur on this project. The preference is to have them monthly but sometimes every two months will be adequate depending on the tasks at the time. Moffatt & Nichol (M&N) will be responsible for scheduling these meetings.
- Kim stated that NTP was provided on this Task Order (TO#1).
- For invoicing, Kim requested a cover and summary sheet with no hours or rates for her approval prior to submitting the invoice in CMIS. Kim requested that we submit our first invoice on 0007057 as soon as possible for processing by the end of the year.
- Kim shared that the Project Justification Statement has been received.
- Kim shared that utility owner information has been provided. Utility estimate requests can be made at the same time as the R/W estimate request.
- Kim spoke about Risk Assessment and mentioned the adjacent wetlands, bridge demolition impacts, and utility impacts typical to bridge projects. David asked for initial indications for off-site detours. Darren mentioned that it was a possibility for this project.
- Kim noted getting the survey and environmental notification letter mailed out as soon as possible. M&N has the new template and will submit the letters to Kim for routing signatures.
- David asked the team to carefully verify the need for pedestrian facilities during construction if the off-site detour is the preferred alternative.
- David also asked if MS4 is required for this project. Darren stated that no MS4 is required for this project.
- Kim stated that SUE is not required on the project.

Action Items:

- Provide "What-if" P6 Schedule when completed – GDOT, Kim Chapman
- Schedule Monthly Status Meetings - Moffatt & Nichol
- Submit first invoice on TO#1 ASAP – Moffatt & Nichol
- Survey and Environmental Property Notification Letters – Moffatt & Nichol

Meeting Minutes

Date:	March 20, 2018	Time:	1:30 PM
Location:	GDOT OGC, Room 408		
Subject:	Alternatives Meeting		
PI No:	PI No. 0007057, SR 16 @ Short Creek, Warren County		
Recorded By:	Darren Wilton		

<u>Attendees</u>	<u>Organization</u>	<u>Phone</u>	<u>Email</u>
Mindy Sanders	GDOT-OPD	678-986-7648	MiSanders@dot.ga.gov
Carol Kalafut	GDOT-Bridge	404-631-1882	ckalafut@dot.ga.gov
Adrienne Conley	GDOT-OES-ECOL	404-631-1845	aconley@dot.ga.gov
Pamela Baughman	GDOT-OES-ARCH	404-631-1198	pbaughman@dot.ga.gov
Spencer Pucci	GDOT-OES-A/N	404-631-1164	spucci@dot.ga.gov
Todd Price	GDOT-D2 PCE	479-553-3405	tprice@dot.ga.gov
Tonia Parker	GDOT-D2 UTLS	478-553-3386	toparker@dot.ga.gov
Jimmy Harbor	GDOT		jharbor@dot.ga.gov
Jamie Lindsey	GDOT-D2 DUE	478-553-3385	jlindsey@dot.ga.gov
Bobby Dollar	GDOT-OES-NEPA	404-631-1920	rdollar@dot.ga.gov
Harold Mull	GDOT-D1 DCE	770-533-8963	hmull@dot.ga.gov
Shannon Giles	GDOT-D1 A2 ENGR	706-583-2644	sgiles@dot.ga.gov
Terri Holbrook	GDOT-D2 DUE	770-533-8316	teholbrook@dot.ga.gov
Joel Seagraves	GDOT-D2	770-533-8279	jseagraves@dot.ga.gov
Chris Marosco	GDOT		Cmarosco@dot.ga.gov
David Smith	Ecological Solutions	770-998-7848	Davidsmith@ecologicalsolutions.net
Darren Wilton	Moffatt & Nichol	404-205-8530	dwilton@moffattnichol.com
Chris Marsengill	Moffatt & Nichol	912-231-0044	cmarsengill@moffattnichol.com
Scott Caples	Moffatt & Nichol	404-205-8536	scaples@moffattnichol.com
Regina Schuster	Calyx	678-795-3624	rschuster@calyxengineers.com
Chris Mroczka	Calyx	678-795-3624	cmroczka@calyxengineers.com
Erin Murphy	VHB	404-417-4086	emurphy@VHB.com

- Mindy Sanders began the meeting with introductions of all meeting attendees.
- Darren Wilton provided handouts of draft concept reports and all alternatives to be discussed.
- Darren Wilton went through the draft concept report
- Darren Wilton discussed items of specific importance in the draft concept reports as summarized below:

Alternatives Meeting Minutes (continued)

PI No. 0007057

March 20, 2018

- Existing traffic in GEOCOUNTS is around 1,840 ADT and projections are expected to exceed 2000 ADT. Truck percentages are 26%. The Traffic Count Location Maps were approved on 2/22/18 and actual counts will be verified when received.
- Rural Minor Arterial (55 mph)
- Existing bridge is 64-feet long, two spans with steel beams, 11-foot travel lanes with 1-foot shoulders. Proposed bridge is approximately 85-feet long, two short spans or single span, 12-foot lanes with 8-foot shoulders.
- ABC methods identified for this project include the use of an off-site detour, on-site detour with temporary bridge, or use of a single span to reduce traffic impacts and construction time.
- Roadway and bridge design criteria was reviewed in the draft concept report.
- Environmental was reviewed by the team:
 - Ecology - Early coordination shows Granite Outcrop species now in season; has potential for typical species, but unlikely. Also, wetland and streams impacts are expected.
 - Stream Buffer Variance is expected due to parallel stream section adjacent to roadway.
 - No history expected, field work to be completed soon.
 - VHB noted a possible ESA at NW quadrant of bridge. GNAHRGIS research shows small lithic scatter (confirmed by Pam) – all preliminary and likely ineligible.
- Darren reviewed three alternatives considered in the concept report:
 - ALT A - Widening to the east
 - Allows MOT without offsite detour
 - Higher cost because parallel bridge construction and pavement realignment
 - ALT B - Widening to the west
 - More ecology on this side
 - Broken-back curve
 - ALT C - Existing alignment with off-site detour
 - Replace bridge at current location
 - Quicker construction
 - A detour map was presented with the following route for trucks:
 - ◆ From the south use SR 123 to Mitchell, then SR 102 to Gibson, SR 177 to Warrenton, then SR 12 to SR 186
 - ◆ Net additional length of 19 miles
 - ◆ A shorter local route, no trucks, is also shown on the map via Mitchell Road, approximately 5-6 miles.
- Additional comments favored the off-site detour as being the best ABC solution at this location. It was agreed that this typically reduces construction cost and impacts.
- Mindy went through the early coordination questionnaires sent to stakeholders
 - EMS responded with a high impact for response times.



Alternatives Meeting Minutes (continued)

PI No. 0007057

March 20, 2018

- Warren County has been supportive of closing the road for expediting construction.
 - Responses from official detour map coordination has not been received yet.
 - Spencer stated that no structures are within 800 feet of corridor for air/noise.
 - Pam stated that all Environmental Survey Boundaries (ESB's) submitted did not cover the entire project length especially near the ends of all three projects. Darren explained ESB's lengths were based on task order scope assumptions. Next TO will address any additional area if preferred alternative is not an off-site detour option.
- Next milestone is the Concept Team Meeting
- Chris asked if there was any consensus on a preferred alternative. The preferred alternative discussed was:
 - 0007057 – ALT C, off-site detour, however it depends on results from detour coordination and cost estimates



Meeting Minutes

Date:	May 16, 2018	Time:	10:00 am
Location:	GDOT District 2 Office		
Project:	PI No. 0007057, SR 16 at Short Creek		
Subject:	Concept Team Meeting		
Recorded By:	Nina Gailey		

<u>Attendees</u>	<u>Organization</u>	<u>Phone</u>	<u>Email</u>
Darren Wilton	Moffatt & Nichol	404-205-8530	dwilton@moffattnichol.com
Chris Marsengill	Moffatt & Nichol	912-231-0044	cmarsengill@moffattnichol.com
David Fox	QK4	404-417-3022	dfox@qk4.com
Monica Fogle	GDOT Dist. Traffic	478-553-3360	mfogle@dot.ga.gov
Ellen Wright	GDOT D2 DPPC	478-553-3407	ewright@dot.ga.gov
Todd Price	GDOT D2 Precon.	478-553-3405	tprice@dot.ga.gov
Jimmy Hobby	GDOT Utilities	478-553-3380	jhobby@dot.ga.gov
Mindy Sanders	GDOT OPD	678-986-7648	misanders@dot.ga.gov
Bryan K. Gibbs	GDOT D2 Const.	478-553-3340	bgibbs@dot.ga.gov
Bonnie Skaggs	GDOT Utilities	478-456-0905	bskaggs@dot.ga.gov
Jamie Lindsey	GDOT Utilities	478-553-3385	jlindsey@dot.ga.gov

- Mindy Sanders, the GDOT Project Manager, began the meeting with introductions of all meeting attendees and everyone's role in the project and a brief description of the project. She then turned the meeting over to Darren Wilton to discuss the project.
- Darren utilized a PowerPoint presentation during the meeting to discuss the Concept.
- Project Background was discussed including the location, project purpose and need, bridge condition, age, and pictures of the existing bridge were included. The existing roadway is a two-lane rural minor arterial (55 mph) located southwest of Warrenton, GA and east of Sparta, GA.
 - Darren noted the existing bridge is 64-feet long, 2-spans with steel beams and concrete caps, 11-foot travel lanes with 1-foot outside shoulders. Proposed bridge is approximately 85-feet long with 12-foot lanes and 8-foot outside shoulders.
 - Darren noted the existing traffic volumes estimated from GDOT's count station as 1,840 AADT near the project corridor. 24-hr Truck percentage is around 26%. Open Year and Design Year volume projections are pending.
 - Darren reviewed the roadway and bridge design criteria from the concept report.

- Environmental considerations were discussed, including Ecology, Aquatic survey, Archaeological, and historic resources.
 - Ecological resources – Early coordination shows Granite Outcrop species in the area with surrounding wetland and stream impacts expected. Stream Buffer Variance is expected due to Short Creek having a parallel stream section adjacent to roadway west of SR 16.
 - History – No resources identified.
 - Archaeology - GNAHRGIS research shows a small lithic scatter at the NW quadrant of the bridge but field research is still being finalized.
 - Air/Noise – No concern mentioned.
- The proposed design parameters were discussed. Roadway will have two 12-foot lanes in each direction with 10-foot (4-foot paved) outside shoulders. The proposed roadway and bridge typical section graphics were presented.
- Three alternatives were discussed for the project, which include:
 - ALT A - Parallel, stage permanent bridge east of existing bridge
 - Longer project length for asphalt roadway tie-in
 - Impacts 3 parcels
 - Two lanes open throughout construction
 - ALT B - Parallel, stage permanent bridge west of existing bridge
 - Longer project length for asphalt roadway tie-in
 - Impacts 1 parcel
 - Two lanes open throughout construction
 - Parallel stream adjacent to roadway presents challenges
 - ALT C – Off-site Detour (**Preferred Alternative**)
 - All bridge construction can be completed without staged construction
 - Construction cost is reduced with shorter overall project length
 - Detour net length increase of 19 miles
- Environmental and Permits were discussed, including NEPA, Ecology, History, Archaeology, Public involvement and Air/Noise.
- Existing utilities were listed and no other utility owners were added.
- Other project items were discussed, including lighting, off-site detour, Transportation Management Plan (TTC), context sensitive solutions and MS4 (permit is not required).
- Carol requested that the sufficiency rating be removed from all concept reports.
- District 2 requested the construction times for alternatives be reviewed and revised.
- Darren asked if there were any comments relating to the selected preferred alternative or the off-site detour in the concept report and no comments were raised.
- Darren ended the meeting asking for everyone to please provide any final comments or questions no later than May 30, 2018.